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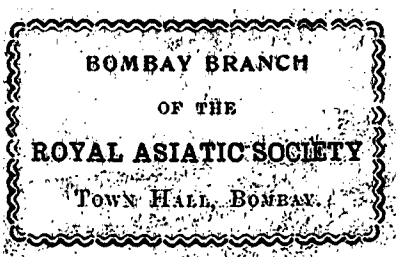

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SCANDINAVIAN ADVENTURES,

DURING A

RESIDENCE OF UPWARDS OF TWENTY YEARS.

REPRESENTING SPORTING INCIDENTS, AND SUBJECTS OF NATURAL HISTORY, AND DEVICES FOR ENTRAPPING WILD ANIMALS.

WITH SOME

ACCOUNT OF THE NORTHERN FAUNA.

BY L. LLOYD,

AUTHOR OF "FIELD SPORTS OF THE NORTH."

£8171

TWO VOLUMES.

VOL. I.

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PREFACE.

THE success of my former Work, entitled "Field Sports of the North of Europe," the reception of which was equally flattering in this country as well as abroad—where it was translated into more than one language—has induced me again to appear before the Public.* And though I have

* In Sweden, where immediately after its appearance my first work was translated, and went through two editions, the following notice appeared in the "Aftonblad," the leading paper of that country—the "Times," in short, of Scandinavia: "The seldomer it happens that unprejudiced foreigners have written on our native country, the more welcome ought their works to be. Arndt, Catteau, Colville, and many others, have described Sweden; and they have often come near the truth. But the larger portion of their materials have been collected in the boudoir, &c.; and the maps of the country have rather attracted their attention than the Natural History of Sweden, its inhabitants, and their customs. Lloyd has with his own eyes seen and judged. His free roving life has placed him in better situations, in those districts through which he has wandered, to study nature and

but little in the shape of personal adventure to relate, as the title of the book would imply, it is still to be hoped that the reader—the sportsman and the naturalist at least—will find matter of sufficient interest to enable him to while away a passing hour.

Mine is a simple story, and told in simple language—necessarily so indeed, from total incapacity of perpetrating anything like fine writing. But even if gifted with the pen of a Macaulay, I would still confine myself as much as possible to "facts and anecdotes," which, as a valued friend truly observed, "are the things wanted, and not eloquence or sentiment."

The Chasse of the bear—the king of Scandinavian wild beasts—forms, as will be seen, a prominent feature in these volumes. Though so much has been said of this animal in my former Work, I trust that the new matter will not be deemed altogether devoid of interest.

Considerable mention is made of the wolf, the lynx, the glutton, the fox, the elk, the rein-deer, and other

mankind than other individuals. One must not believe, nevertheless, that his work is only interesting to the lovers of the chase, for from a great portion of what he says of the inhabitants of this country, many interesting and previously unknown details can probably be gathered. With a similar interest one follows him from the savage beasts which prowl through our forests, to social life, as well in the circles of the great, as in those of the humbler classes. Throughout he shows the same open-heartedness; and unlike Acerbi, who met with whales in the Mälar Lake, he only speaks of what he has himself seen and experienced, or of what he has received from the best authorities."

animals of chase, found in the northern forests; and of that curious little animal, the lemming, the periodical migrations of which have excited so much curiosity and speculation.

The birds which came under my personal observation, are likewise treated of, as well as all those pertaining to Sweden and Norway: the reader is therefore presented with a complete, though necessarily succinct account of the Scandinavian Ornithology.

A pretty full account is given of the fresh-water fishes. Several of these which are unknown to us in England will be found drawn from life by a celebrated artist, which portraits to Ichthyologists may be of some value.

In one chapter devoted exclusively to the natural history of the salmon, the reader will find some curious speculations which may tend to clear up several debateable matters which, for a long period, have puzzled the brains of naturalists; and in another chapter the lover of the angle will find information which may be of service to him, should he direct his course to Northern Europe.

The reader is also made acquainted with many of the devices resorted to in Scandinavia for entrapping as well birds and beasts, as the finny tribe; the nature of which, by the aid of the accompanying diagrams, will be readily understood. Some of the devices are curious and ingenious enough, and for the most part, I believe, quite unknown in England.

One chapter is devoted to the Asiatic Cholera, the dire

disease with which it has pleased Providence to afflict this country at the present time. The subject may not be considered germain to this work; but I have thought it right to introduce it, as well because some useful information may be gathered from it, as to show the imminent danger to which a town is exposed—as was the case with Gothenburg—when timely preparations are not made to meet the fearful enemy.

Other chapters record the more striking events in the early life of the great Gustavus Vasa. The subject-matter has been partly gleaned from traditions picked up during my wanderings in the Dalecarlian forests—the scene of many of his most perilous adventures. I venture to hope that these chapters will repay the trouble of perusal.

In composing these volumes I have drawn largely from the writings of Swedish naturalists and others; more especially from the *Tidskrift för Jägare och Naturforskare*, or the Sportsman's and Naturalist's Journal, a publication to which some of the first people in Sweden, as well in regard to talents, as station, were contributors under their own name.

At times the obligation is duly acknowledged, but not always so; as well for the reason that constant references spoil the thread of the story, as that my own observations are so frequently mixed up with matter thus derived, that quotation would be difficult if not impossible.

In conclusion. It was my intention to have introduced into these pages many of the superstitious and legendary

stories of which I have treasured up vast numbers, but as the collection has become very considerable, I have thought it best to embody them, together with other matter in connexion with it, in a separate work; which may not improbably be hereafter submitted to the public.

L. LLOYD.

16, KING STREET, ST. JAMES'S,
DECEMBER 22, 1853.

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SCANDINAVIAN ADVENTURES.

CHAPTER I.

DESCRIPTION OF RONNUM — RENT — FURNITURE — PRICE OF PROVISIONS — SEATS OF THE GENTRY — MUSIC — DANCING — CARDS — DINNER-PARTIES — SOBRIETY — GOOD MANNERS — FLOWERS — AMUSEMENTS — CONDITION OF THE PEASANTRY — CRIME.

WHEN I last took leave of my readers, at the close of the second volume of my former work on Scandinavia, published in 1831, I was hutted at Lap-Cottage, in the wilds of Wermeland. Subsequently, I pitched my tent near the small town of Wenersborg, situated on the southern extremity of the great Lake Wenern; and it is from the period of my abode at this spot that I now resume the narrative of my residence in Scandinavia.

Ronnum was the name of my dwelling, or rather of the estate on which it was situated. The proprietor farmed the land himself; but having another residence at some distance, he let the house to me. It was immediately

on the high road leading from Gothenburg to Wenersborg, and at about three miles from the latter town. It was very beautifully situated. In front, the country was picturesque, whilst at some three hundred to four hundred paces in the rear flowed the River Gotha, here a wide stream, of which the house commanded a splendid view. The property was well wooded, and many fine oaks adorned the park-like grounds that surrounded the house. Take Ronnum altogether, there are not many more beautiful spots in the midland or southern parts of Sweden.

The house contained fourteen or fifteen rooms, and might therefore be almost called a mansion. A tolerably large garden, and some considerable fishing rights, were attached to it; and for the whole, independently of taxes, &c., which only amounted to a few shillings, I paid little more than ten pounds annually! This will give an idea of the very economical terms on which, as often happens when the proprietor of the estate is non-resident, one may rent an unfurnished house in the rural districts of Sweden.

But furniture in that country—provided a man, as with myself, be satisfied with that of a homely kind—is not a very expensive affair. It was not so to me at least; for on taking possession, I supplied myself with everything requisite at a most reasonable outlay. Chairs, for instance, cost me about three shillings the dozen; large folding dining-tables, at three to four shillings each; a chest of drawers about the same sum, and everything else in proportion. But though well enough made, they were of simple deal, and purchased besides in Gothenburg, where such articles, manufactured by the neighbouring peasantry at their leisure hours, are much cheaper than in the rural districts.

Cooking utensils and crockery were nearly as cheap, as well as fire-wood.

And Ronnum had the farther advantage of being so near to Wenersborg, then considered one of the cheapest market-towns in that part of Sweden, as to give me the opportunity of supplying the larder expeditiously, as well as economically.

As it may be of interest to some, I insert below the prices of a few of the common necessaries of life. But it must be remembered, that in seasons of scarcity, the prices of some of the articles enumerated, such as grain, &c., vary often from fifty to one hundred per cent. These prices also apply to twelve or fifteen years ago; for since that time, owing to various circumstances, the cost of provisions has considerably advanced in the town in question: A score of eggs, 4*d.* to 6*d.*; a pound of beef or mutton, 2*d.*; a pound of cheese, 2*d.*; a pound of butter, 4*d.*; a gallon of milk, 2*d.*; a sack (four bushels) of potatoes, 1*s.* 6*d.*; a sack of oats, 3*s.*; a sack of barley, 6*s.* to 7*s.*; a sack of wheat, 12*s.* to 14*s.*

There were several pretty places belonging to the gentry in my vicinity. Amongst the rest, Gäddabäck, or the pike brook, where afterwards I lived myself. For the most part, the residences were delightfully situated on the banks of the Gotha.

Thus I had no want of neighbourhood, and all evinced towards me, as a stranger, the utmost courtesy and good-will, which made my residence in that part of the country very agreeable. Hospitality and a hearty welcome, as regards the rural districts at least, may be said to be amongst the characteristics of the Swedes.

And happily a very friendly feeling appeared to exist amongst the neighbouring gentry, so that society was not, as is too often the case elsewhere, divided into sets; but we all met together on the most cordial and friendly footing. The intercourse between the several families was pretty frequent. Dinners were given occasionally, but small evening parties were of every-day occurrence.

These social meetings were almost invariably enlivened with music, in which the Swedes are generally proficients, and to which they are devotedly attached. They are justly proud of their great musical genius, Jenny Lind, whose extraordinary vocal powers have been, and still are, the theme of admiration in Europe as well as America.

And our little parties not unfrequently finished with a dance, of which, as well as of music, they are equally fond. The Swedish ladies are very admirable dancers, and the gentlemen also; but according to our English notions, exhibit rather too much action.

But cards were the prevailing attraction of the evening—with the elder portion of the company at least, few of whom could resist the pleasure of taking a part. Whist, Boston, L'Hombre, Vira—the last peculiar to Sweden, and said to be the most intricate of all games—were those most in vogue. But Killé, or Camphio, Gropois—the latter resembling the French game, La Bouillote—and Faro, were not unfrequently played.

Speaking generally, card-playing is a perfect passion with a Swede, and if he be an idle man, the pack is seldom out of his hand, morning, noon, or night. To myself, who never shared in that amusement, this card-playing was an excessive bore.

During the continuance of these little parties, fruits, confectionary, &c., as well as refreshments of various kinds, were always served in abundance, and the evening usually concluded with a *petit souper*.

Their great dinner parties, as indeed is commonly the case everywhere, and in all countries, were somewhat heavy affairs; for the eternal courses of roast and boiled—French cookery not being much in vogue—often lasted for near three weary hours; and I, who am contented with a single joint, wished myself anywhere else than in the banquetting-hall.

A custom is prevalent in most parts of Scandinavia, it may be proper to remark, that before the announcement of dinner, the guests partake of a cold collation, to give, as it is emphatically called, a stimulant to the appetite. A small table is laid out in an adjoining room, furnished with various liquors, and a variety of good things, such as caviare, smoked salmon, anchovies, butter, cheese, &c.

At table a fair proportion of wine is drunk, though seldom more than a glass or two after the meal is over, for the gentlemen always retired to the drawing-room along with the ladies; and coffee was commonly served up soon afterwards.

The upper classes in Sweden are very moderate in their potations, rarely drinking to excess. In point of fact, and to their honour be it spoken, I do not believe that, during my long residence in that country, I saw half-a-dozen individuals, in what we should call the rank of gentlemen, in a state of inebriety. What a contrast this to the scenes which were once too frequently witnessed in England!

These social parties were the more agreeable—and the

remark applies to society in general in Sweden—not only from the good feeling, but from the very good manners that universally prevail. The Swedes, like the people of other countries, have their faults; but this I can say conscientiously, that I do not believe there is a more innately courteous and polite people on earth; and furthermore, that a man must bring it on himself, if an offensive observation be made to him, or in his hearing, when in company. Even when in a somewhat inferior station in life, the easy, good, and unembarrassed manner of the Swede, so greatly superior to that of the same class in England, has often struck me forcibly. But this matter is easy of explanation, for in Sweden the aristocrat does not consider himself degraded by mixing in society with people much beneath him in station—a feeling so contrary to that prevailing in England, where it is somewhat questionable whether the tradesman has an opportunity even once in his life of sitting side by side with the great man; and the Swede is, in consequence, not only enabled to rub off the rust of his position, but to acquire a certain degree of polish.

As with us, the Swedish ladies are passionately fond of flowers, and their boudoirs and drawing-rooms are almost universally decorated with various exotics. A pretty *parterre* is always to be seen near the house; but the variety of flowers is not so great, nor do they all possess the same exquisite scent as in England. Some violets, for instance, though in outward appearance nearly the same, are totally void of perfume. In the early part of the spring, after the inodorous but beautiful snowdrop has drooped its head, several of the forest-flowers—amongst the rest the primrose, the white and blue anemone, and the lily of the valley—emblem of the

purity of the fair owners—beautify their gardens; and as the season advances, the rose, the jasmine, the carnation, the honeysuckle, and the sweet-scented briar, shed their delicious fragrance around.

The dahlia, which on my first residing at Ronnum, was hardly known in that part of the country, is now become common everywhere. Thanks to the kindness of some of my English friends, I had a splendid collection of these beautiful flowers when residing at Gäddabäck, which were the admiration of every one. But after a time, the climate caused me to tire of horticultural pursuits, for one Midsummer's Eve there came so severe a frost as to destroy the greater part of the dahlias; and on the 7th of September of the same year, a second frost, that totally cut up the few I had been fortunate enough to save. This, it is true, was an unusual season.

But though the Swedish ladies are thus fond of flowers, it is seldom anything in the shape of a greenhouse, in the more northern districts at least, is to be met with. This struck me as somewhat singular; for in a country like Sweden, which for one-half of the year is fast bound in the iron chains of winter, in which time little besides a sea of snow meets the sight in every direction, one would have naturally supposed that few who could afford it would be without a conservatory, to delight the eye and the senses amid the general desolation of the scene.

It is not a little remarkable that one of the coldest countries in Europe should have been the cradle of the great Linnæus, the father of systematic botany.

The Swedish gentry, speaking generally, are not much given to out-door amusements, and seldom engage in more

than very moderate exercise. Nutting expeditions, pic-nics, &c., are less frequent than with us in England, which is the more surprising, as from the summer being so short, it might naturally be expected that they would make the most of the fine weather. The winter is their grand social season, at which time they usually have feasts, balls, &c., to satiety, and, out of doors, provided the weather be favourable, sledge parties are the order of the day.

The peasantry in my vicinity were generally in comfortable circumstances. Those that farmed their own ground, as was the case with very many, were well off; and even the Torpare, the class who hold small homesteads under others, had little to complain of. They had substantial dwellings, and, so far as fell under my observation, sufficient and wholesome provisions. The mere day-labourer, or he whose bread altogether depends on the wages he may earn, is almost unknown in the rural districts of Sweden; for almost every one, even the very poorest, has a small holding, either rented, or of his own, which, in part at least, serves to support him.

Wages with me, taking winter and summer together, it may be proper to remark, did not exceed sixpence to eightpence the day; and I am inclined to believe that, as respects the rural districts, this may be assumed as the average of wages throughout Sweden. In towns—more especially if a man is expert in the use of the axe, can carpenter a little, in short, he may probably earn double that sum.

Serious crimes were rather uncommon in my neighbourhood, but petty thefts were not very rare. I speak not, however, from personal experience, never having suffered beyond a very trifling extent. That there should be rather

more than an average of worthless characters in my neighbourhood, as compared with the country in general, was little to be wondered at, for Ronnum was not only situated close to a navigable river, always the haunt of disreputable characters, but near to Wenersborg, which in the old Norwegian wars had been a garrison town, and the population in consequence somewhat demoralized.

Drunkenness, the besetting fault of the lower classes in Sweden, as the passion for cards is of the higher, was unfortunately very prevalent amongst my poorer neighbours, and the cause probably of a large portion of the crime that did exist.

CHAPTER II.

A LEGEND OF THE HUNS—DOMARE-RING—GIANTS.

THERE were many legendary stories, superstitions, &c., connected with the country about Ronnum. Amongst the rest, relating to the very picturesque hills of Hunneberg and Halleberg, which were immediately in front of, and at less than a mile's distance from the house, and were remarkable for their geological structure. As a specimen of these legends, I give the following:

In olden times—thus runs the story—there was a nation in the interior of the present Russian empire, called the Huna folk, or the Huna people, who were very powerful, and so numerous, that the word Huna is at the present day used to express anything infinite in number or abundance, as for example, "Huna-hop, Huna-här," that is, an incalculable crowd or army.

These people at length invaded Sweden, for which aggression two reasons are assigned: the one, that the Götar, or Goths, as the Swedes were then called, had repeatedly assisted

their enemies: the other, a family feud (the particulars of which it would be tedious to mention) for King Humle, who ruled the Huns, was grandfather to Angantyr, King of the Goths.

Be the cause of the quarrel what it might, King Humle landed in Sweden, with so immense a host—every male in his dominions, from twelve years old and upwards, capable of bearing arms, having been pressed into the service—that the like had never been seen before. This invasion excited so universal a terror in the minds of the people that from thence arose the adage: "Der var Hun Dån," which signifies something terrible or awful.

Laudur, who, owing to the advanced age of King Humle, had the command of the Huns, and who was King Angantyr's brother, was first opposed by Hervor, their own sister. This princess, who was renowned over the whole North for her great deeds in the tented field, possessed a strong castle near the spot where the landing was effected, and where, in anticipation of the threatened attack, a large force under her command was then assembled. Musing one morning in her bower, which overlooked the forest Mörkved, the heroine observed above the tops of the trees, so dense a cloud of dust in the plain beyond, as almost to obscure the sun itself, and from the glittering of arms and panoply, occasionally perceptible, she soon made out that the dreaded invaders were at hand. Despatching Ormer, her foster-father, to bid Laudur battle in front of the southern portal of the castle, the maiden forthwith donned her armour and sallied forth at the head of her men to meet the enemy.

The engagement was long and bloody. "Ormer," so the saga relates, "slew so many that it was hard to count them."

The host of the Huns was, however, so great, that the Goths at length began to give way. On seeing the slaughter of her people, the heroic Hervor, grasping her sword with both hands, and rushing into the thickest of the fight, cut down all opposed to her. When at length she had approached to within hearing of her brother Laudur, she challenged him to single combat; but he, declining the invitation, replied: "I came not here thirsting after thy blood, my sister." Thus frustrated in her vengeance, she plunged with redoubled fury into the densest ranks of the invaders, and at length, covered with wounds, fell lifeless from her horse.

The death of the princess was the signal for the dispersion of her men, for on witnessing her sad fate, they broke and fled in every direction.

Laudur mourned greatly over the heroine; and when the battle, which he had now completely gained, was over, he gave her remains honourable sepulture.

Ormer, together with all who had escaped, fled from the ensanguined field, and riding night and day, he presented himself before King Angantyr, and chaunted thus:

"From the South am I come
To bring thee tidings;
In flames is all the country,
And the heath of Mörkved;
And all Göta land is dyed
With the blood of thy faithful men."

And afterwards he added:

"But the maiden I saw,
The daughter of Heydrick,
Thy sister,

Sink to the earth;
The Huns slaughtered
Her and many of thy heroes."

And furthermore:

"Far gayer to battle
She went than to the dance,
Far gayer to the battle-field
Than to the banquet
Or bridal feast."

When King Angantyr heard the sad intelligence, he in his overwhelming grief plucked out his beard, and for a while remained silent; but at length he exclaimed: "Unbrotherlike wast thou treated, my never-to-be-forgotten sister." And then looking around him in his hall, and seeing but few of his warriors present, he thus in anger "qvad" or sung:

"Many were we
When mead we quaffed,
Now are we few
When numbers are needed.

"None do I see,
Among my champions,
Though I would offer
Golden treasures

"To him that will ride forth,
And bear the shield
To the Hunnish armies
With the message of war."

This appeal was thus responded to by Gissor, then an old man, but who in his day had been a famous warrior, and who was then residing at the court of King Angantyr:

"Guerdon I ask not,
I seek not thy red gold:
Yet will I ride forth
And bear the shield
To the host of the Huns,
And dare them to battle."

It was an ancient custom for the invader, when he appeared in an enemy's country, to leave to the king of that country the right of naming the "valplats," or battle-ground; and until the combat was decided, to refrain from ravaging the land.

In accordance with this usage, Gissor, after having put on his most sumptuous armour, and mounted his horse, inquired therefore of Angantyr:

"Where shall we mark out
The battle-field?"

To which appeal the King rejoined:

"At Dunaheden, and around
The far-spread Josen Mountain
Battle shall wait them,
Where oft-times valiant
Champions were warring,
Reaping the glorious
Harvest of fame."

Gissor now rode forth to the Hunnish army, but approached not nearer than to be enabled to hold converse with its commander. In a loud voice he then "qvad:"

"Your squadrons stand confounded,
Your chieftains are trembling,
Crest-fallen is your monarch,
And Odin has forsaken you.

'I challenge you to battle
On Dunaheden,
In the valleys
Round Josen Mountain.

"There may Odin
Doom all your horses
And all your arrows
To mingle and hurtle
As I have spoken."

When Laudur heard Gissor's words, he exclaimed in wrath: "Die shalt thou, Gissor, Angantyr's man, sent forth from Arnheim."

Then said King Humle: "We must not spill the blood of an Arnheimer who journeys alone."

"I fear neither the Huns nor their bows of horn," retorted Gissor in defiance: and putting spurs to his charger, he hastened back to King Angantyr.

The monarch, on his arrival, questioned him as to his mission to the King of the Huns?

"I challenged him," replied Gissor, "and appointed Dunaheden as the battle-ground."

Angantyr farther inquired the number of the Hunnish host.

"Vast is their number," answered Gissor. "Sixty and three are their fylkingar. For every fylking, five thousand; in every thousand, thirteen hundred; in every hundred, four times forty armed men."

When Angantyr had satisfied himself as to the state of the Hunnish host, he despatched messengers in all directions, and summoned every one capable of bearing arms to take part in the coming fight. And when his preparations were

completed, he proceeded to Dunaheden, where he found the Huns already awaiting him; and although his own people were very numerous, the enemy outnumbered him twofold.

The battle commenced on the following morning, and lasted throughout the whole day. But on the approach of evening, both parties returned to their respective encampments.

Thus the fight continued for the space of eight days; many of the leaders were wounded, but no one knew the number of the slain. Meanwhile, men crowded from all parts to the standard of King Angantyr, so that although his losses were great, he had not fewer people than at the beginning.

The combat now raged fiercer than ever. The attacks of the Huns became more desperate; for they saw that unless they dishonoured themselves by suing for peace, their lives depended on their gaining the victory.

As the day closed, the Goths in their turn became the assailants, and the enemy began to waver and fall back. When this was observed by King Angantyr, he advanced from within his fortress of shields (Sköldborg) at the head of his men, with Tirfing, the enchanted sword, in his hand, and slew both men and horses.

The warriors who formed King Humle's Sköldborg then fell back, and the brothers exchanged blows with each other. King Humle and Laudur fell, and the ranks of the Huns broke and fled; and the Goths slaughtered so many that the rivers were choked up with bodies, and overflowed their banks, and the valleys were filled with horses, blood, and dead men.

The combat ended, Angantyr strode over the field of battle, when, finding Laudur amongst the slain, he chaunted thus:

"Did I not offer
To share with thee, brother,
Gold, lands and people,
As thou desiredst?

"Now hast thou nought
As guerdon of battle,
Neither the red gold
Nor the wide lands.

"Cursed be my fate
That I, my brother,
Have been thy slayer.
Oh, hard was the doom
Of the pitiless Nornas."

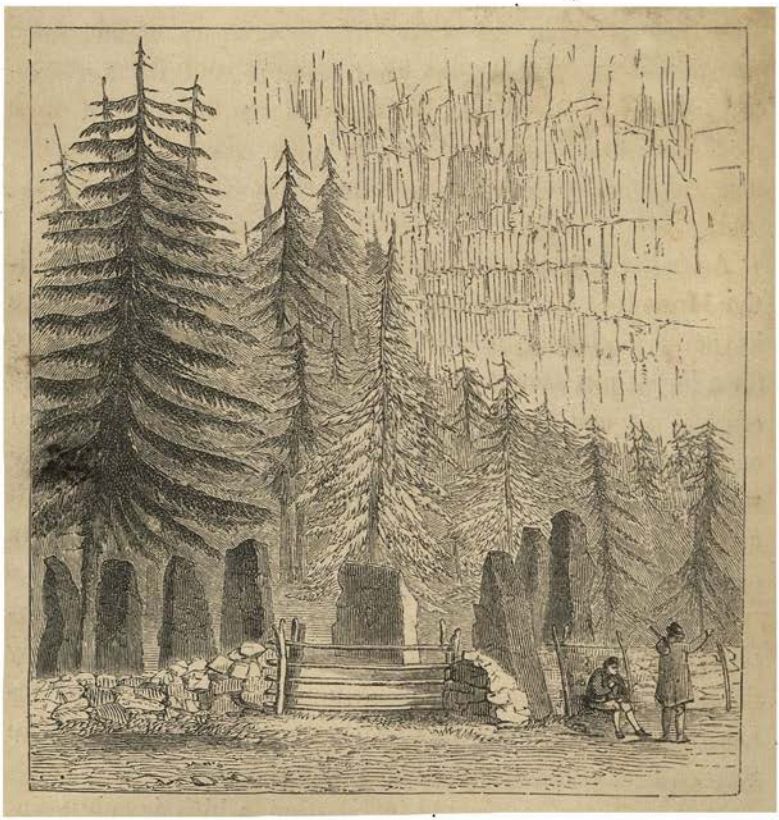
After the battle of Dunaheden, thirty thousand of the fugitive Huns took refuge in the Hill of Huna (Hunneberg), hence its name, and they fortified themselves there. Afterwards, for a long time, they kept the surrounding country in a state of great disquiet by their predatory excursions. But wearied out at length, the peasants rose as one man, and armed only with clubs (whence the combat was called the "Klubb-fejd," or the battle of clubs), they succeeded in driving the invaders out of their strongholds.

After this defeat the Huns dispersed, and spread themselves over the whole country, where they settled quietly down, and in time were merged among the rest of the inhabitants. To this day indeed, the names of many places in Sweden bear testimony to their presence.

Halleberg, the other hill in question, which is only separated from Hunneberg by a narrow valley, is said to have derived its name from Hallo, a renowned chieftain of the Huns, who after the "Klubb-fejd," retreated to Billingsberg, where he built and fortified a town, the remains of

which are still visible; where for a long time he bravely defended himself.

Independently of the above legend, and the great natural beauty of the pass between Hunneberg and Halleberg, these hills are remarkable in more respects than one.



THE DOMARE-RING.

At the foot of Halleberg, for instance, is pointed out a so-called Domare-Ring, a circle of large stones, placed

upright on the green sward, where, in former times, judgment was administered.

And immediately beyond the Domare-Ring, is a mural precipice of from two to three hundred feet in height, called the "Ätte-Stupa,"* from the summit of which, according to tradition, the infirm, the "utlefvade," or those who had outlived their powers, and those who were weary of life, were accustomed in crowds, and after feasting and drinking, to cast themselves headlong; for, according to the creed of their great hero and lawgiver Odin, by thus committing suicide, they qualified themselves to enter into the joys of Valhalla!

And at the foot of Halleberg, moreover, though at some distance from the Domare-Ring, a spring is pointed out, which in bygone days was looked upon as holy, and by the peasants, is still supposed to retain its pristine virtues; as an evidence of which, hundreds of people, even in my time, flocked to it every Midsummer Eve, to quaff of its healing waters.

According to the belief of the superstitious, ancient as well as modern, giants have at all times existed in Scandinavia; and many stories are recorded of their exploits. But, independently of fabulous beings, it would really seem by the accompanying document, the truth of which can hardly be called in question, that veritable giants—perfect Goliahs in their way—were at times to be found in the peninsula.

"When, in the year 1763," so runs the document, "the ground was dug for the enlargement of Näs Church, (within eight or nine miles of Ronnum,) which is situated on a large

* The accompanying sketch, kindly depicted for me by my friend, Colonel Ehrengranat, represents the Domare-Ring and the Ätte-Stupa.

and high 'ättebacke,' or ancient burial-mound, the bones of an extraordinary man were found. The skull was a foot in breadth, and between the eyes was a space of eight inches. The teeth, which were still fast in the jaw, were as large as those of a horse. The ribs were of double the usual size, and the shin bones thirty-six inches in length; all which we the undersigned, as well as many others, saw with our own eyes. And to the full truth of this statement we certify, as desired, in the presence of the subscribing witnesses."

The signatures of the churchwarden and others, attested by the clergyman of the parish, follow; and the document, which is still preserved in the archives of the Church of Näs, goes on to state that, "the skeleton was again interred under a flat stone in front of, and on that side of the door of the vestry facing the pulpit, and at the very spot where the excavation was made."

CHAPTER III.

VARIETIES OF FISH NEAR RONNUM—ICHTHYOLOGISTS—COMMON PERCH—PIKE-PERCH — RUFFE — MILLER'S THUMB — COTTUS POECILOPUS — COTTUS QUADRICORNIS—THREE-SPINED STICKLEBACK—TEN-SPINED STICKLEBACK —FOUR-SPINED STICKLEBACK.

THERE was very good fishing at Ronnum; but before speaking of my performances with the rod, &c., it may be as well to say something of the fish inhabiting the Wenern, the River Gotha, and other neighbouring waters—as also to give a slight account of such other fresh-water fishes as are included in the Scandinavian Fauna. Of the fish found on the adjacent sea-coast, I shall have occasion to speak hereafter.

The illustrations of fishes which follow, are from specimens, many of large size, brought by myself in spirits of wine from the various localities referred to. They were drawn by Mr. Alexander Fussell, so well known as a first-rate zoological draughtsman, and engraved on wood by Mr. Mason Jackson, second to no one in his profession.

For the information of the ichthyologist, it may be proper to mention that the following are the chief works treating of the fishes of Sweden and Norway, viz.: Artedi's "Ichthyologia," Lugd. Batav. 1738; Pontoppidan's "Natural History of Norway," (Engl. Transl. London, 1755); Linnæus' "Fauna Suecica," 2nd Ed. 1761; Retzius' "Fauna Suecica," 1800; Nilsson's "Prodromus Ichthyologiæ Scandinavicæ," a concise treatise published in 1832; "Fiskarne i Mörkö Skärgård," 1835, by Ekström, and subsequently translated into German, under the title of "Die Fische in den Scheeren von Mörkö;" "Skandinaviens Fiskar," an incomplete though admirable work, jointly edited by Professor Sundevall, M. Ekström, and the late lamented Professor B. Fries, and most beautifully illustrated by that highly-talented artist, M. von Wright; and "Danmark's Fiske," by M. Kröyer, also a very superior work, though not yet quite completed.

From several of the works enumerated being rather out of date, and the extreme conciseness or incompleteness of the rest, one is unable to obtain full and correct information regarding ichthyological subjects. I am happy to state, however, that Professor Nilsson promises us shortly a full account of the Scandinavian fishes (a portion of the work, indeed, has already appeared) which will in a degree make good the deficiencies that myself and others at present labour under.

The Common Perch (*Abborre*, Sw.; *Perca fluviatilis*, Linn.) was abundant with us, as well in the Gotha, as in the Wenern. This fish is widely distributed over Scandinavia, being found in most of the lakes and rivers from the extreme south of the peninsula to Lapland; indeed, from its larger size in the far north, it is believed to thrive

better there than elsewhere. It is also found in the Skärgård (as the belt of islands fringing the Scandinavian shores is called), off the eastern coast, where the water, however, is only brackish; but more generally near to the mouth of some lake or river, and seldom or never regularly out to sea.

The President M. af Robson speaks of a sub-species of perch, found in the Lake Tisaren, in the province of Nerike, which goes by the name of Skållingar. "Nothing is known," that gentleman tells us, "regarding their propagation, neither is milt or roe ever found in them. They resemble in appearance the common perch, but are more slender in form; in proportion to the body, the head is larger than that of the perch. The back is black, the upper part of the body, on the contrary, lighter or of paler colour than the perch. For the most part they are found singly, or in small companies, never assembling in large shoals. They are scarce, and seldom exceed half-a-pound in weight."

The so-called *Rud-Abborre* (the same spoken of by Linnæus as found in a pond near Upsala, a fish which, from its crooked and elevated back, was at one time imagined to be a hybrid, between the Crucian and the Perch) is believed by Nilsson to be a variety of the latter; and by Ekström its malformation is ascribed solely to local circumstances.

The flesh of the perch is in Sweden, as in England, held in high estimation, more especially that of such as are captured in salt water. It is believed, moreover, to have this peculiarity, so uncommon with the finny tribe, that one may eat of it daily for a long time without being surfeited. Its flavour, however, depends much on the water from which the fish is

taken. Those from shallow lakes, with grassy bottoms, are smaller, leaner, and have less flavour than such as are bred in large lakes, where the water is clear and deep, and where there is a current, with a stony bottom. If the fish be kept for a short time it loses its flavour, for which reason it is commonly dressed as soon as may be after it is caught; and to make assurance doubly sure on this point, there are those barbarous enough to pop the poor fellow, living as he is, bodily into the boiling water!

But it is not alone for the table that the perch is valued in Sweden (such, at least, was the case until very recently), for a very strong glue is made out of its skin. This, when dried, is steeped in cold water, and after the scales have been scraped off, it is placed within a bullock's bladder, which is tied so securely at the mouth that no water can penetrate. This bladder is then placed in a cauldron, and boiled until the skin is dissolved. The scales are also at times made use of in the mounting of rings, and other ornaments. It is not many years since, indeed, that they were used in embroideries on ribbons, reticules, &c.

In my vicinity, the spawning season with the perch was from about the middle of April to the end of May, or it might be that it extended into the earlier days of June. Its commencement and termination was greatly influenced, however, by the state of the spring. The perch pass the winter in the deeps; but at the breaking up of the frost, they, in large shoals, make for the strand; for such spots, more especially, in which the water is pretty deep, the bottom stony or sandy, and overgrown with the common reed (*Arundo Phragmites*, Linn.), or where it is strewn with boughs of trees, &c. But if such localities are not to be met with, the

"lek"* is carried on amongst clusters of rushes (*Scirpus*, Linn.), and river horse-tail (*Equisetum fluviatile*, Linn.)

The spawning process with the perch, is said to be somewhat peculiar. Unlike the ova of other fish, which, simply enveloped in a mass of gelatine, readily separate as soon as deposited by the female, those of the perch are enclosed in a net-like membrane that keeps them attached together.

The fish, to get rid of the ova (so goes the story), rubs her belly against a sharp stone, or a stick, until the membrane in question becomes attached to it, when, wriggling her body, she makes a quick forward movement, and thus, piece by piece, draws out the string of eggs, in appearance not unlike that of the toad, and which is often from five to six feet in length. Some, indeed, go so far as to aver, that to facilitate this operation, she introduces the point of a reed into the vent, to which the gelatine becomes fastened, and as a consequence when she moves forward, the string follows in her wake.

The perch is very prolific. According to Bloch, two hundred and eighty-one thousand eggs have been found in an individual of only half-a-pound in weight; but by some this is considered an exaggeration. The fish itself, nevertheless, is not proportionately numerous. Several reasons are assigned for this. First, that there are many more males than females, which is said to be a well-ascertained fact. Secondly, that owing to the roe adhering together, it is more easily consumed by fish of prey and water-fowl; and

* This word (meaning literally sport or play) is applied as well to the particular spot where birds or fishes congregate for the purpose of pairing or spawning, as to the act itself of their so congregating for that special purpose.

lastly, that from the eggs being strung together, they are more liable to be cast ashore by storms, where they soon perish.

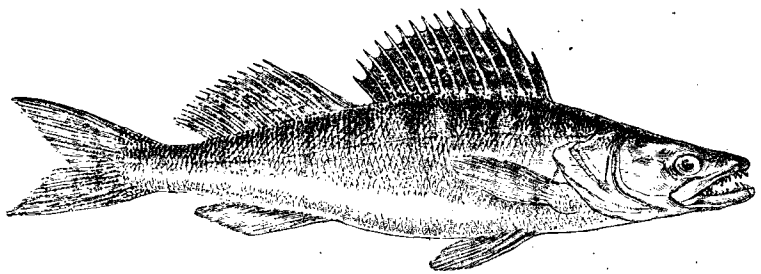
The perch is of slow growth. Kröyer says, that at the commencement of the first winter, the young fish are only an inch in length; in the third year, about six inches, and the weight three ounces; and in the sixth, their length sixteen inches, and weight one pound and a half. Swedish and Danish naturalists seem to be of opinion, that it is not until its third year that this fish is capable of procreation.

With us at Ronnum, the perch did not attain to any considerable size. I myself never killed one of more than three pounds weight, nor did I ever hear, from an authentic source at least, of any perch much exceeding five pounds. The monster head—two spans in length—spoken of by Scheffer, as preserved in the Church of Luleå, in Lapland, and assumed to be that of a perch, Swedish naturalists of the present day regard as that of some other fish; and, moreover, not a *Sebastes*, as Cuvier seems to have imagined.

The perch is captured in Sweden by a variety of devices, but in summer chiefly, perhaps, with hook and line. In my neighbourhood, more especially in the Wenern, great things are at times done by this method. "About midsummer," so writes a friend, resident on the northern shores of the lake, "a couple of men may, in the course of three or four hours, capture fifteen to eighteen lispund—that is, from three hundred to three hundred and sixty pounds."

At this season, perch may frequently be seen in large shoals near to the surface, and continually leaping out of the water in pursuit of small fry, insects, &c. During the chase, it often lashes the water with its tail, thereby

creating a particular sound, which the fisherman imitates by slapping his finger in the water, in order, as he imagines, to attract the shoals to him.



THE PIKE-PERCH.

Perca Lucioperca, Linn., "Retz., Faun. Suec.," p. 366.
... ... "Nilsson, Prod.," p. 82.
... ... "Kröyer, Fishes of Denmark," vol. I. p. 32.
... ... "Ekström, Mörkö," p. 94.

The Pike-perch (*Gös*, Sw.; *Lucioperca Sandra*, Cuv.), apparently so named in reference at once to its appearance and its habits, was abundant in my vicinity, or rather in the Wenern, for though we occasionally fell in with it during our fishing excursions in the Gotha, it was rare. It is pretty common in most of the large lakes in the more midland and southern provinces of Sweden; and at times a variety of the species is found in the eastern Skärgård, as well as in sundry of the bays and inlets of the Baltic. Singularly enough, it seems a mooted point amongst Swedish and Danish naturalists, whether this fish be an inhabitant of the Norwegian lakes or not.

As regards the waters of the interior at least, the learned in Sweden and Denmark only admit of a single species of pike-perch; but the fishermen in my neighbourhood spoke (erroneously, no doubt) of a second. That which spawned first, and which they described as the larger and darker in colour of the two, they called the Is—, or Ice-Gös, and the other the Abborre—, or Perch-Gös.

The pike-perch's movements in the water are described as heavy and ungainly, and his disposition dull and inert. Hence the saying: "Dum som en gös," that is, stupid as a pike-perch.

"This fish," so we are told by Ekström, "prefers deep, clear, and pure water, where the bottom is of stones or sand. On clayey bottoms, where the water is easily rendered turbid, he is never, so far as my experience extends, to be found; and if found at all in such localities, it is only very rarely, and then by accident." Kröyer says also: "The gös delights in deep water, with sandy or stony bottoms. Under other circumstances it would seem scarcely to thrive moderately well, or even to exist at all." But in this matter these great authorities are somewhat in error, for gös abounded in an immense inlet of the Wenern, in my neighbourhood, where the water is not only comparatively shallow, but almost invariably so excessively turbid, that it was a miracle to me how the fish could manage to see the bait.

Though I myself cannot remember ever hearing the character of a wanderer attributed to the pike-perch, Boie would make him out to be somewhat discursive. "In the lakes of Holstein, the fishermen," he tells us, "have noted a periodical increase and decrease in their numbers. For several successive

seasons they are abundant, and then for years together they become very scarce, or almost altogether disappear."

The pike-perch feeds chiefly on small fish, more especially Nors, or the fry of the smelt. It is said indeed, by some, that he only inhabits waters where that fish is found. He also feeds on small fluviatile and marine animals, and when pressed by hunger—so we are told by Kröyer and Ekström—on vegetable substances. The pike, the perch, and other fish of prey, prefer greatly living or fresh baits; but the gös, on the contrary, is believed to have a special liking to such as are dead and tainted. In some places, indeed, the fishermen are accustomed to expose the small fish intended as bait for some hours to the rays of the sun, that they may thereby acquire an odour, prior to placing them on the hook.

By all accounts this fish is not tenacious of life. The fishermen in my neighbourhood asserted, indeed, that the so-called Is-Gös, dies as soon as taken out of the water, oft-times even as soon as hooked, or enveloped in the folds of the net, a fact which by some was attributed to their excessive fatness; and this story is in a degree corroborated by Swedish and Danish naturalists. Kröyer tells us, for example, "That the gös is not hard-lived—indeed that its life is extinct soon after it leaves its native element;" and Ekström, "that when he finds himself a prisoner, and has made one or more efforts to escape, he resigns himself quietly to his fate, and one finds him floating belly upwards on the surface; as soon as he is captured he discharges the air from the swim-bladder, which occasions a noise resembling eructation. He commonly dies at the same instant. The fishermen are therefore accustomed, as soon as he is hauled into the boat, to pierce the tail

near the caudal fin, that the blood may run freely, and the flesh in consequence be whiter and more palatable."

And when speaking of removing the gös from one country or locality to another, Ekström farther says: "By reason of his dying immediately after being taken out of the water, it is difficult to transport him, if of any size; and it is equally so to transplant him by means of the roe, which can with difficulty be procured in the deep water where he spawns; and taking it from the spawning female, although mixed with the milt of the male, which experiment I myself have tried on several occasions, very rarely succeeds. In the sump, or fish-box, he only lives a day or two." Krŏyer, when alluding to this subject, testifies to a similar effect, and mentions "a dealer in fish, who at different times attempted to convey the gös alive from Prussia to Copenhagen, but who always failed in the attempt."

Though the pike-perch is represented as so short-lived when taken out of the water, I do not think he dies quite so quickly as is commonly believed. I judge so from what has come under my personal notice, for those at whose capture I have assisted, have on the average lived an hour or more at the bottom of the boat, in which at the time there was little or no water. Neither do I imagine the difficulty of obtaining mature eggs would be so great as described by Ekström; and I therefore hope the experiment will be tried in England, and that at no distant day the gös will be included in the British Fauna.

The flesh of this fish is white, firm, and very palatable. It is eaten dried, salted, or fresh. If the latter, it should be dressed (boiled, never fried) as soon as may be after it is caught, otherwise it soon becomes insipid. Though so

delicious a fish, it is said, nevertheless, that if partaken of daily, one soon tires of it. In some parts of the country the fat is used by the peasants as an embrocation for the cure of rheumatism, sprains, &c.

In the Wenern, the spawning season of the gös is April and May. Swedish and Danish naturalists tell us, however, that the process goes on up to the middle of June, and they attribute its long continuance to the circumstance of these fish only spawning in the night. Furthermore, that at this time, the fish leave the deeps and approach the shoals, where the female deposits her roe amongst stones, weeds, &c., "but never," they say (though this seems to me very doubtful), "in less than from sixteen to twenty feet of water." The eggs, which are light in colour, and very small in comparison with the size of the fish, are exceedingly numerous. Bloch, in a female of three pounds weight, found no less than three hundred and eighty thousand six hundred and forty.

The fry are of rapid growth. Ekström speaks of an individual of seven to eight inches in length, kept in a small piece of water, that he imagined to be about a year old, and which in the course of three years weighed from five to six pounds.

The gös attains to a large size in the Scandinavian waters. It has, to my knowledge, been occasionally killed in the Wenern exceeding twenty pounds weight; and we read of one taken in the Lake of Karsholm, in Scania, which weighed twenty-seven pounds. But monsters such as these are exceptions to the rule, the more usual weight of the adult fish being only about ten or twelve pounds.

The gös is captured in Sweden by devices of various kinds. Near Ronnum great numbers were taken by nets, night lines, &c. At the neighbouring estate of Frugård,

situated on an inlet of the Wenern, as much as sixty lispund, or about twelve hundred pounds, have been caught of a morning during the spawning season; and in the course of the whole season, five hundred lispund, or ten thousand pounds. As a consequence of this abundance, the town of Wenersborg was amply supplied with this fish. They were brought in cart-loads, and usually sold at one shilling the lispund, or about a halfpenny of our money per pound.

The Common Ruffe, or Pope (*Gers.* Sw.; *Acerina vulgaris,* Cuv.), was abundant with us as well as over nearly the whole of Scandinavia. It is said to be more plentiful, however, in the northern and central portions of the peninsula, than in the more southern. It is also found in the eastern Skärgård, but, so far as I am aware, not in the western.

This fish, according to the Swedish naturalists, prefers slow running streams that are clear, and with bottoms of clay or sand; for though met with in such as have muddy bottoms, he does not seem to thrive. In the spring he seeks the shallows, but towards autumn falls back into the deeps, where he passes the winter. He keeps near the bottom, and is seldom seen even in mid-water. He is solitary in his habits; the greater part of the year he passes alone, and it is only during the spawning season that he is seen in shoals. In disposition he is apparently sluggish, and seems rather to wait for his prey than to seek it. When he does move from his station, it is not by a continuous progressive motion, but by short and rapid shoots. It is not incapability, however, that causes this seeming apathy; for when alarmed, his movements in the water are so quick as to have given rise to the saying, "qvick som en gers,"—that is, agile as a ruffe.

He is in the highest degree voracious, and devours indifferently small fishes, insects, worms, and soft-bodied animals that are found attached to grass, stones, or other substances lying in the water. He seldom if ever attempts to capture anything that is at large, and in rapid motion. From this cause, when he sees the worm or other bait appended to the angler's hook stationary, he, without nibbling, as fishermen would say, pounces upon it at once, and this more especially if it be lying at the bottom.

The ruffe is commonly in good condition, and the circumstance of his body being covered with a slimy matter, which exudes from the oval depressions about the head and the lateral line, makes him appear fat. If to this be added, that so soon as taken out of the water, he spreads his fins, opens his gills, and as it were, inflates his body—"Han bröstar sig," as they say in Sweden; that is, he swells in the manner of a turkey-cock — one can well understand his nickname of "skatt-bonde," a term which is applied to a peasant who, from holding his land under the Crown on specially easy tenure, is, as compared with others of his station, unusually well off.

Owing to the slimy matter spoken of, this fish very often goes also by a designation which there is some difficulty in naming to ears polite, to wit, "Snor-gers,"—Snor implying the mucous excretion from the nasal organ.

The ruffe is very tenacious of life. It is said of him that, as with some of the *Cyprini*, he can be kept alive a long time if frozen as soon as captured, and afterwards thawed in cold water.

Though the flesh of this fish is firm, white, palatable, and easy of digestion, it is but little in request with the upper

classes in Sweden. But the peasants in some parts of the country value it highly, and call it "kungamat," or food for a king.

A great prejudice is entertained by the fishermen against the ruffe, in consequence of its being supposed not only to drive away other fish, but to devour their roe. The first charge is most likely altogether groundless, originating probably in the circumstance that when, owing to storms or bad weather, other fish retire from the strand to the deeps, the solitary ruffe remains, and becomes the only prize of the fisherman; but the second charge, though not fully proved, may possibly be true.

The ruffe spawns in April or May. The lek is carried on in moderately deep water, where the bottom consists of sand or clay, and is overgrown with rushes. Amongst these the female deposits her eggs, which are minute, yellowish in colour, and very numerous. Bloch counted no less than seventy-five thousand in one fish.

The ruffe is generally considered slow of growth. It never attains to any considerable size. One Swedish naturalist tells us, it has been met with as large as an ordinary perch; but this I take to be a mistake, for six to eight inches is their more usual length, which is seldom or never exceeded.

Owing to its tenacity of life, the ruffe is highly valued by the fishermen as bait; such, at least, was the case in my neighbourhood. From want of better, indeed, I have occasionally had recourse to it when "spinning" for trout or salmon, and have found it killing, especially after having rendered it more inviting by cutting off the spiny fins.

The Miller's Thumb, River Bullhead, &c. (*Simpa*, Sw.;

Cottus Gobio, Linn.), was very common with us as well in the Gotha as the Wenern, and indeed in nearly all the rivers and lakes throughout Scandinavia. It is also found in the eastern Skärgård, but not to my knowledge in the western.

This fish does not go in shoals, but alone. Its chief resorts are under stones (hence its Swedish designations "sten-simpa," stone-bullhead; "sten-sugare," stone-sucker, &c.), where it lies in ambush for its prey, consisting of worms, larvæ of insects, crustacea and small fry. Its flesh is white and well-flavoured, but from its small size, it is not much sought after.

With us, the miller's thumb was said to spawn in April and May; Ekström, however, imagines not until June. But of its proceedings at the lek, little seems to be known. Formerly it was believed that this fish lived in monogamy, that the female deposited her roe in holes formed by herself, and that afterwards, in the manner of birds, she sat upon them until they were hatched. It was even asserted that the female would furiously attack anything that attempted to disturb her nest; as also that the male often acted the maternal part; but this fable is now pretty well exploded.

The miller's thumb is the smallest of the Scandinavian *Cotti;* and though it occasionally attains to five or six inches, its more usual length is from three to four. In appearance the sexes differ but little.

According to Swedish naturalists, the *Cottus pœcilopus*, Heck, is also an inhabitant of the eastern Skärgård, but as far as my knowledge extends, is neither found on the western coast, nor in the waters of the interior.

Of the other three marine species of the genus *Cottus*, of which more hereafter, when referring to the west coast of Sweden, it may be important here to mention, that the *Cottus quadricornis*, Linn., is a constant resident in the Lake Wettern, in the central part of Sweden, a fact but little known to naturalists generally.

The Rough-tailed, or Three-spined Stickleback (*Hundstagg*, *Stor-Spigg*, Sw.; *Gasterosteus aculeatus*, Linn.), was common in my vicinity; as also throughout Scandinavia, from the extreme south of Sweden, to far beyond the Polar Circle; and this as well in the waters of the interior, as on the eastern and western coasts of the peninsula. It is frequently met with, indeed, in such small, isolated places, that the double wonder is, in what manner it became an inhabitant there, and how it can continue to exist.

The three-spined stickleback prefers moderately rapid waters, and in the summer resorts much to the shallows, more especially to such as are exposed to the rays of the sun. Towards autumn, on the contrary, it retires farther from the shore, and in the winter retreats to the deeps; such, at least, is the presumption, for when captured at that season in the fishermen's nets, it is usually in large numbers together. It is seldom seen singly, but almost always in larger or smaller shoals. It feeds on insects, worms, larvæ, small crustacea, and the minute fry of other fish; and although of so diminutive a size, is one of the most voracious of the finny tribe.

Perhaps the most remarkable circumstance in reference to this species of stickleback, is the extraordinary changes observable in its colours. In the winter, the upper part of the head and the back is blue, and the body pure silvery-white. In

the summer, on the contrary, the upper part of the head, and the whole of the back, down to the lateral line, is dark grey. During the spawning season the variations in its hues are wonderful. The back then becomes brownish, the cross-bars darker, and the silvery-white sides acquire a strong *argento-cupreous* tint, implying a colour produced by the mixture of silver and copper. This is more especially the case with the females. The males are marked with a red spot under the chin, at the point where the gill membranes meet, and which extends rapidly, so that the redness commonly occupies the whole of the under surface of the body, from the point of the lower jaw to the vent. In different individuals, however, the redness in question occupies more or less space. With some it reaches above the lateral line; whilst others again are altogether red, with the exception of the upper part of the back, which is reddish-brown, and the upper surface of the head, which is at all times of a strong *verditer* colour. The irides are of a beautiful green.

The spawning season with us is about the month of July; even as early as May, however, the males as well as the females begin to change their hues—a sure sign of its near approach; in point of fact, it actually commences as soon as the transformation in colour is fully effected. The lek itself is commonly held in some grassy spot near to the strand, and myriads assemble to take their part in it.

A somewhat marvellous account is given by Swedish and Danish naturalists as to the way in which the reproductive processes are carried on. The males and the females separate. The males, which would seem to be much fewer

in number than the females, choose each for himself a certain spot, where he reigns paramount. Here, with fibres of grass and weeds, he constructs a tunnel-shaped nest, leaving only an opening in the roof, for the admission of himself and the females; and to give this his seraglio the greater stability, he strews the floor with grains of sand, which he often brings from a distance in his mouth; and in order that the fibres composing the upper part of the nest, may adhere the better together, he deposits secretions from his own body.

Desperate jealousies exist among the males; and in the guarding of these, their domestic sanctuaries, it requires but the very slightest provocation on the part of one to set up the back of his neighbour, and to bring on a regular combat. On these occasions the belligerents dash at each other with the rapidity of an arrow, making the while, with their sharp lateral spines, a ferocious side-attack, which not unfrequently proves fatal, after which, and with similar speed, they retreat again to their own little fortress.

Whilst the males are thus engaged in these knightly exercises, the females, in larger or smaller numbers, make excursions round and about the battle-field. One leads the shoal; she swims hastily forward, suddenly halts, and places herself in a perpendicular position, with her head downwards. The others having followed, collect about her, and station themselves, closely packed, in a similar attitude. When thus singularly congregated, she suddenly thrashes the water, as fishermen say, with her tail—a signal, it would seem, for departure—for in the twinkling of an eye the whole company disperse; and this is repeated many times.

During the temporary cessation of the combats spoken of, the male joins company with the females, when, as is usual with suitors, he assumes his gayest colours, which, in brilliancy and variety, equal those of the rainbow; and either by force or persuasion he gets one or other of them into his nest, through the aperture in question, where she deposits her eggs, and then forces her passage out again, but in an opposite direction to that by which she entered. Immediately after her departure, the male himself takes her place in the nest, for the purpose, it is to be presumed, of fructifying the eggs, and then goes wooing again, when the same process is repeated.

The number of eggs thus deposited in one nest is very great; and after the spawning season is over, the male stations himself perpendicularly over the entrance of the nest, and guards the eggs until they are hatched. For twenty days subsequent to the birth of the fry, he tends them as affectionately as a hen does her chickens, and it is only by degrees he allows them to leave the nest, where he brings them food.

The lek usually lasts from four to six days, but its duration is in some degree dependent on the state of the weather. Most fishes during the spawning season lay aside their natural shyness, and are consequently easy of capture; but the contrary is the case with the three-spined stickleback, which at that period is more than usually vigilant. When the lek is over, its brilliant colours gradually vanish, and it then assumes its ordinary appearance, and disposition.

From its abundance everywhere, during certain seasons, one might be led to imagine the female to be very prolific. But this is by no means the case, for she has not in both

ovaria more than from one hundred and ten to one hundred and fifty eggs, which are large in proportion to the size of the fish; and as from the limited number of the males there is reason to believe that only a certain number of these are impregnated, her fecundity cannot be great. The growth of the fry is rapid; but northern naturalists doubt the truth of the story as to the fish living for only three years. In the interior waters of Scandinavia, it seldom exceeds three inches in length, but on the coast it is often met with an inch longer.

The Ten-spined Stickleback (*Små-Spigg*, Sw.; *G. pungitius*, Linn.), as with the three-spined, was very common in the vicinity of Ronnum; as also in almost every lake and river from the far north to the very south of Sweden. It is plentiful, moreover, in the eastern Skärgård, but so far as I am aware is not found in the western.

The habits of the *G. pungitius*, which is said to be of a lethargic disposition, its manner of feeding, &c., much resemble those of the *G. aculeatus*. Like that fish, it is fond of society, and is usually found in large shoals. At certain seasons of the year, indeed, the two species are frequently met with together.

Though the remarkable variation in colour observable in the three-spined stickleback during the spawning season, has not been noticed at that period in the ten-spined, the tints of the latter, nevertheless, differ very materially in summer and winter. During the winter the upper part of the head and back are blueish-brown, the sides silvery-white, with fine dark spots; whilst in the summer, on the contrary, the head and the whole of the upper part of the body are olive-green, the under part lighter green,

with an *argento-cupreous* tint, which under the chin and at the base of the pectoral fins becomes more ruddy.

The spawning season, which is somewhat earlier than with the three-spined, is about the end of June. Males and females then congregate in great numbers, and advance as high up as possible on the strand. The eggs, which are of an orange colour, and large in proportion to the size of the fish, are deposited among grass. The three-spined stickleback is excessively shy, as was said, at the period in question; but the contrary is the case as regards the ten-spined, for so long as the lek continues, they are not in any way timid, and will, indeed, allow themselves to be taken by the hand.

As with the *G. aculeatus*, the growth of the *G. pungitius* is believed to be very rapid; it rarely, however, exceeds two and a half inches in length, and is, in fact, the smallest fish that inhabits the Scandinavian waters.

The stickleback is never, I believe, eaten in Sweden. The scattered individuals which almost at all times are caught in nets with other fish, are cast aside as offal to feed the pigs, &c. When, however, during certain seasons it is taken in very great numbers, it is boiled down for the oil. A tunna, or some four bushels of recently caught fish, will produce between two and three gallons of oil, which is commonly used for lamps. The refuse at the bottom of the pan in which the fish are boiled, form so very rich a manure, that two tunnor of it mixed with a sufficient quantity of water, is considered equal to ten tunnor of that in ordinary use.

The method adopted for the capture of both species of the sticklebaok is very simple. The fishing season commences in

the early part of November, and continues until the ice begins to form. At nightfall, and when the spot where the fish are congregated has been ascertained, which of a calm evening at sunset is known by the surface of the water being ruffled as if from rain, two fishermen repair to the spot in a boat, at one end of which is a *Bloss*, or torch of wood; and whilst one man keeps the boat stationary, by means of an oar or a pole driven into the ground, the other scoops up the fish with a hoop-net, and at times in such abundance, that several boat-loads may be obtained in the course of a single night.

In addition to the two mentioned species of *Gasterosteus*, Swedish naturalists speak of more than one form of the three-spined stickleback, but these they consider as mere varieties; whereas English ichthyologists deem them to be distinct species.

The Four-spined Stickleback (*G. spinulosus*, Jenn. and Yarr.) is also believed to inhabit the Scandinavian waters.

CHAPTER IV.

THE CRUCIAN—THE TENCH—YELLOW BREAM—WHITE BREAM—CYPRINUS BALLERUS—CYPRINUS WIMBA—CYPRINUS BUGGENHAGH—THE IDE—THE ASP.

THE Crucian, or Prussian Carp (*Cyprinus Carassius*, Linn.), was common in the ponds, in my vicinity, as also by all accounts in the Wenern, &c.; but there it never came under my observation. With the exception of the far north, this fish is said to be found almost everywhere in the interior waters of Scandinavia, as also in parts of the eastern Skärgård.

A difference of opinion would seem to exist amongst northern naturalists respecting this fish; some contending that there are two species—namely, the *C. Carassius*, Linn., *Sjö-Ruda*, or lake-crucian, Sw.; and the *C. Gibelio* of Bloch; *Damm-Ruda*, or pond-crucian, Sw.; whilst others again, and amongst the rest Ekström, are of opinion that they are one and the same; and that the difference observable in size and colour is solely owing to locality; and from their synonyms, habits, &c., nearly agreeing, this view of the matter would appear to be the proper one.

The crucian, in parts of Sweden is looked upon rather as a dainty, but its good repute is partly owing to the rich sauces with which it is mostly served up. It is said to disagree with some people. Ekström makes mention of an individual whose head, after partaking of it, always became swollen. In other respects, however, the man continued in health, and after a day the swelling went down.

Ekström says the crucian is the most tenacious of life of all the carp family. "One summer morning at five o'clock," so he tells us, "a fish was taken out of the *Sump*, or fish-box, where it had been confined for several days, and was carried up to the parsonage, where it was placed on a table, and a description and a portrait of it were taken. About six in the evening, and after the fish had been fully thirteen hours out of the water, it was cut in two across the middle. The heart, liver, &c., were taken out, drawings made of the sections, and all the appearances were noted down. When all this was done, and the divided portions were about to be taken away, parts about the head still moved, the gills opened and shut, the mouth gaped and closed. I allowed the pieces to remain on the table, that I might ascertain how long any signs of life would continue; and it was not until nine o'clock that these evidences of vitality ceased. The fish had therefore lived out of the water for sixteen hours, the last three when mutilated as described."

With us the crucian spawned about June. It is a prolific fish. The young are said to grow slowly, but to be soon capable of procreation.

The Tench (*Lindare; Sutare*, Sw.; *C. Tinca*, Linn.) was said to be an inhabitant of some of the lakes in my vicinity, as also of the Wenern, but it never came under

my actual observation. It is pretty common in the southern and more midland portion of Scandinavia, but its limits to the northward do not appear to be very well ascertained. It is found likewise in parts of the eastern Skärgård.

Owing to its dark and greasy appearance, it has several nicknames, as for instance, "Skomakare," or shoemaker, &c. Formerly, when the belief was general that he had power to cure diseases both in men and animals, he was called the "fishes' doctor," a designation that he still retains amongst the peasantry in some places.

In Sweden the spawning season with this fish is about June. It is very prolific. Bloch found two hundred and ninety-seven thousand eggs in a female weighing only three-quarters of a pound.

The tench would not appear to attain to any considerable size in Scandinavia. Ekström tells us the largest he ever saw did not exceed nineteen inches in length; and Kröyer says that he has not met with it of greater weight than four or five pounds.

The Yellow Bream (*Braxen*, Sw.; *C. Brama*, Linn.) was abundant with us, as well in the Wenern as the Gotha. We saw but little of it in the river, however, in consequence of its keeping to the still deep pools, to which we had not often occasion to resort. This fish is found in almost all the larger of the Scandinavian waters, from Scania to near the Polar Circle, but most plentifully in the more central and southern parts of the peninsula. It is also an inhabitant of the eastern Skärgård; but those in salt water are neither so large nor so fat as those in fresh water.

The yellow bream, as with several others of the *Cyprini*, undergo great changes of colour and form, determined by

the season of the year, the nature of the water, &c. The variation is at times so great as to cause some ichthyologists to doubt whether they are separate species or not. The younger ones are always less deep in colour in proportion to the length of the body than the older ones, and have a more slender shape; and at this age, therefore, the fishermen frequently confound them with others of the bream tribe.

The favourite summer haunts of the yellow bream are clear and moderately deep water, with a grassy bottom, especially where the *Isoëtes lacustris*, Linn., grows, which he roots up with his snout, as a swine does; which grass-like plant, when seen floating on the surface, gives information of the track he has pursued, and of his then whereabouts. Hence *braxen-gräs*, or bream-grass, is the name by which the plant in question commonly goes in Sweden. But as the season advances this fish retires to the deeps, where he selects for himself quarters for the winter, and here, closely packed together, he remains during that inclement season. Such places, generally known to the fishermen, are called *braxen-stånd*, or bream-stands.

The yellow bream is a cautious, cunning, and extremely shy fish. He is seldom met with alone, but almost invariably in smaller or larger shoals. Loud noises, such as thunder, the ringing of bells,* shots, and the like, always send him to the bottom, from whence, after such an alarm, he does not return for several days.

He is very tenacious of life, and if packed in wet grass can be transported a great distance.

* In certain parishes in Westergothland that border on the Wenern, the church bells, for this reason, are not allowed to be rung during the spawning season.

We in England set little value on the bream, considering the flesh as "bony and insipid;" but the Northmen say we are somewhat wrong in this matter, for though they admit the bony part of the allegation, they aver that the flesh is exceedingly palatable when the fish is of a good size. They acknowledge, however, that the fat with which it abounds, and on which its flavour mainly depends, renders it rather indigestible. It is eaten fresh, salted, and smoked; with the wealthier classes it is commonly brought to table *inlagd*, that is cold, and in its own gelatine, and served up with vinegar, pepper, &c., when to my taste it is no despicable dish. The head and tongue, when thus prepared, are in especial esteem.

In my vicinity the spawning season with the yellow bream is about the end of May or beginning of June; and as it occurs just at the time that the juniper and the bird-cherry-tree blossom, the fisherman regulates his movements accordingly. The resorts of the fish at this period are muddy-bottomed strands, overgrown with grass. When such places are not to be met with in lakes, they are sought for in larger rivers; and in this case they always select some grassy bend or cove, at the side of the stream. The first shoal that arrives at the spawning-ground, which is never changed, but year after year is the same, consists altogether of males. Afterwards the females join company, when the lek commences.

The spawning, which would seem to go on more especially during the silence of the night, is attended with considerable noise, caused by the fish, who move to and fro in close phalanx, constantly thrashing the surface of the water with their tails. The female deposits the roe on rushes, &c.,

against which she rubs herself, to facilitate their deposition. The period of the lek is more or less regulated by the state of the weather, usually continuing from three to four days. When the older fish have retired from the spawning-ground, the younger take their places.

The yellow bream is very prolific: in a fish of eight pounds weight, one hundred and thirty-seven thousand eggs have been found. They are hatched in about three weeks, and the fry are said to grow quickly.

Swedish naturalists tell us the bream attains a weight of eleven pounds. I never heard of larger in the Wenern; but the Chamberlain, G. A. Schmiterlöw, informs me that in the Lake Emmaren, in Ostergothland, he has seen bream captured weighing eighteen pounds, and so exceedingly fat, as to render it needful, before preparing them for the table, to place them in a *Sump*, or fish-box, for three or four weeks, that they may be, so to say, sweated down. And I am the less inclined to question the former part of this statement, because it was corroborated by the Count Corfits Beckfriis, one of the largest landed proprietors in Sweden, who assured me, when on a visit to him in Scania, that he had weighed and eaten of one of fifteen pounds, and knew of another captured in his neighbourhood that weighed eighteen pounds. Bream of twelve to thirteen pounds, the Count told me, were not at all uncommon in that part of the country.

The quantity of bream that are taken in certain parts of Sweden by one device or another, and this as well during winter as summer, is very considerable. In the year 1848-9, a neighbour of mine captured two hundred lispund, or four thousand pounds weight, of that fish in the Wenern,

but this is nothing compared with what has been done elsewhere.

As for instance, at the celebrated bream-stand, called *Hak-varpet*,* in the Hallbosjön, a lake in Sudermanland, and at about twelve English miles from the town of Nyköping. The exclusive right of fishing this particular stand is vested in the governor of the province, of whose salary, indeed, this privilege forms a part. The right, however, is seldom exercised more than once within the year, and that in February or March; and from its being looked upon as a kind of *event*, thousands of the inhabitants of the surrounding country flock to the spot on the appointed day. The fish are taken in a drag-net of immense size, which is drawn under the ice in much the same manner as described in my former work. From the length of time, however, that the operation lasts, only a single cast is made in the course of the day; but this cast is very remunerative, producing on the average from ten thousand to forty thousand pounds weight of bream and other fish! An eye-witness assures me, indeed, that in 1846 or 1847, he himself was present when no less than thirty thousand pounds weight were thus captured. A sort of fair is held on the ice itself, where the fish are disposed of in lots to the best bidders, on which occasion, as may well be supposed, the usual appearances of *utile cum dulci* do not fail to be seen.

In connection with this subject, a somewhat curious circumstance was related to me by M. Schmiterlöw: "Although,"

* *Varp* (*varpet*, with the definite article) implies, as well a particular spot where one draws the net, as also a cast or draught of the net.

said that gentleman, "the bream is very abundant in the districts bordering upon the Härad of Ydre in Ostergothland, where in former times that fish was also numerous, not one is now to be found. Their absence is looked upon by the peasants as a judgment for the misdeeds of a former clergyman of theirs, who having on one occasion lost his net, proclaimed from the pulpit that it was stolen, thereby bringing scandal on his congregation. The missing net, however, was afterwards found filled with decomposed bream in another part of the water, where it had been carried by a heavy storm which arose during their lek."

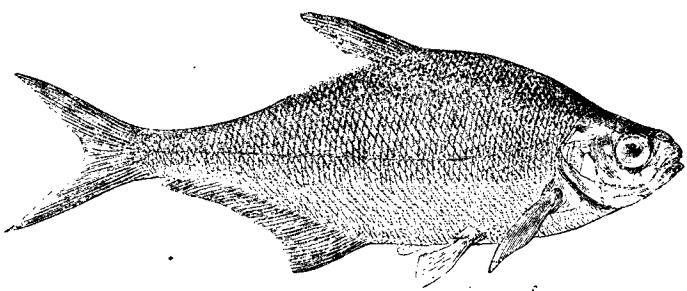
The White Bream, or Breamflat (*Björkna*, Sw.; *C. Blicca*, Bloch), was common with us, and also in almost all the lakes and rivers in the more central and southern parts of Sweden, but with its limits to the northward Swedish naturalists seem unacquainted. It is an inhabitant likewise of the eastern Skärgård.

From its likeness to the young of the yellow bream, it is frequently mistaken for that fish. It feeds on grass, worms, insects, and their larvæ, and is said to be the most ravenous of the bream tribe. From its gluttonous propensities, indeed, it has acquired amongst fishermen the nickname of the *ätare*, or (great) eater. To the angler he is a great annoyance; for though he makes his approaches to the hook with more avidity than most fish, he generally contrives to nibble away the bait, and consequently escapes capture.

Though so voracious, it is always lean, from which cause, coupled with being small and bony, it is but little sought after, and is seldom eaten, excepting when no other fish are procurable.

With us, the white bream spawned shortly after the yellow bream. If the weather is fine, the lek lasts about three days—that is, each lek, for there are said to be two or more, though with intervals between them. The older fish spawn first, and shortly afterwards the younger. During the continuance of the lek, the fish with their tails lash the surface of the water, where at other times they seldom or never appear. Although usually shy, and easily alarmed by noises of any kind, yet at this period they become tame and fearless, and may readily be captured.

It is a very prolific fish. Bloch counted in an individual of four ounces in weight, one hundred and eight thousand eggs. The white bream seldom attains to more than a pound, and generally not to much more than half that weight.



CYPRINUS BALLERUS.

Cyprinus Ballerus, "Retz. Faun. Suec.," p. 361.
... ... "Nilss. Prod.," p. 30.
... ... "Scand. Fishes," p. 112, pl. 26.
Abramis ... "Kröyer," p. 411.

The *C. Ballerus*, Linn. (*Flira*, Sw.), was very common in my vicinity. It is found also in all the more midland portions of Sweden; but owing to its being often confounded with others of the bream tribe, its geographical limits do not seem to be very well ascertained.

This beautiful fish is remarkable from its tail being greatly cloven, whence with us it was called the *lång-stjert*, or long-tail; as likewise from its scales being very much smaller as compared with other species of bream, those of the lateral line amounting to about seventy in number.

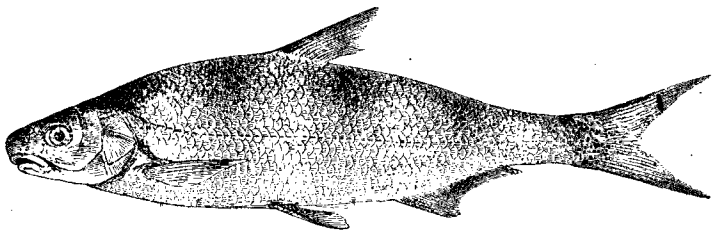
Its habits seem greatly to resemble those of the yellow bream. It feeds on grass, insects and worms. During the summer months it generally lives almost alone, but towards winter it congregates in large numbers, and retires to the deeps, where, like the yellow bream, it has its particular stand or station.

This fish is not in repute for the table, the flesh being soft, white, bony and flavourless. It is fattest and best in the early part of the spring.

In our vicinity the *C. Ballerus* spawned in April or beginning of May, and before the yellow bream. The spot selected for the lek is a shallow, with a grassy bottom; frequently indeed he resorts to over-flooded pastures. The lek lasts from one to three days, and during its continuance this fish, like the yellow bream, is very shy. Bloch found in an individual of a pound in weight, sixty-seven thousand five hundred eggs. Little seems to be known as to the period that elapses before the eggs are hatched, the growth of the fry, &c.

The *C. Ballerus* does not attain to any great size. According to Swedish naturalists it is from six to eight

inches in length; but I have seen individuals, and have some in my own possession, considerably larger.



CYPRINUS WIMBA.

Cyprinus Wimba, "Retz. Faun. Suec.," p. 359.
... ... "Nilss. Prod.," p. 31.
... ... "Ekström, Mörko.," p. 49.
Abramis ... "Kröyer," p. 400.

The *C. Wimba*, Linn. (*Wimma*, Sw.), was common with us, both in the Gotha and the Wenern; as also, according to Swedish naturalists, in the midland and more southern portion of the Scandinavian peninsula; but of its limits to the northward they appear to be much in doubt. It is plentiful in the eastern Skärgård. Ekström says, indeed, its proper home is salt water.

The *Cyprinus Wimba* much resembles in appearance the young of some species of *Coregoni*, but is readily distinguishable from them by its having no second dorsal fin.

It is reputed to be of a cunning and sly disposition, and in consequence is seldom taken in great numbers, excepting at the lek. It dies very soon after being taken out of the water.

According to Ekström, this fish feeds chiefly on crustacea,

insects and worms, more especially on a species of small snail (*Nerita*), and but very rarely on grass.

It is not in much culinary repute, and if served up at the tables of the higher classes, it is only after more than ordinary preparation.

In our vicinity the *C. Wimba* spawned about the end of May. The female deposits her roe amongst stones, against which she rubs herself, to facilitate their exit. She is very prolific, three hundred thousand eggs having been found in one individual. From what Artedi says, there is ground for believing that during the spawning season, the males, as with several others of the *Cyprini*, are covered with horny excrescences. Swedish naturalists seem not informed as to the time that elapses before the eggs are hatched, the growth of the fry, &c.

With us the *C. Wimba* seldom exceeded one quarter, or at the most, half-a-pound in weight; but Kröyer—whether right or wrong, I know not—speaks of this fish attaining to upwards of a foot in length, and as weighing from one to near two pounds.

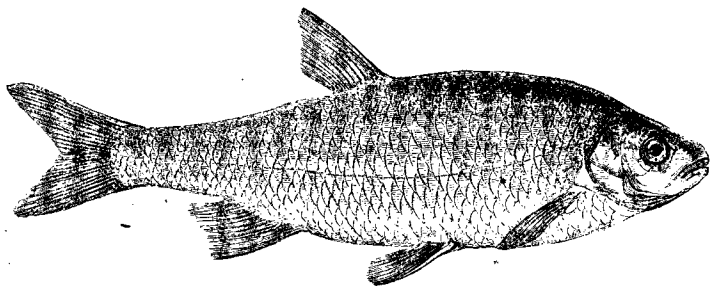
We had another bream, called by the fishermen Sjö-Ruda, or Lake-Crucian, but of what species I cannot exactly make out. Mr. Yarrell, to whom I submitted several specimens brought from the Wenern, is inclined to think it the *C. Buggenhagii*, of Bloch.

In appearance this fish is not unlike the Red-eye (*C. erythrophthalmus*, Linn.), but is easily distinguished, from its being thinner, having smaller scales, and its fins being less red.

The fishermen aver that it has a separate lek, which takes place after those of the yellow and white bream are over.

It never attains to any considerable size, seldom, I believe, to a pound in weight. Those that came under my own observation were not much more than half that weight.

With the exception of the *C. Farenus*, of Linnæus and Nilsson—which fish, at the present day, is believed to be no other than the young of the yellow bream—and the several species enumerated, there is no other of the Bream tribe, I believe, considered by northern naturalists as belonging to the Swedish Fauna.



THE IDE.

Cyprinus Idus, "Retz. Faun. Suec.," p. 358.
... ... "Nilss. Prod.," p. 27.
... ... "Ekström," p. 5.
... ... "Scand. Fishes," p. 59, p. 11.
Leuciscus ... "Kröyer," vol. III. p. 447.

The Ide (*Id, Sjö-Karp*, Sw.; *C. Idus*, Linn.) This fish, which though included by Yarrell and other authorities in our Fauna, is hardly known in England, was very plentiful indeed with us in the Götha and the Wenern, as also throughout Scandinavia generally; and there are few of the waters of any magnitude, from Scania to

Lapland, of which it is not an inhabitant. It is found likewise in the eastern Skärgård; but I have my doubts whether it attains to so large a size in salt as in fresh water.

During the summer months the favourite resorts of the adult ide are deep pools with stony bottoms, where, upon fine and calm evenings, one may see them swimming near the surface. The young, on the contrary, resort more generally at this season to grassy shallows.

The ide lives chiefly on aquatic plants, insects, and their larvæ; but it feeds at times on small fish, as is evidenced by their frequently taking the bait, when one is spinning, to which fact I myself can testify.

As with others of the *Cyprini*, this fish is tenacious of life, and will exist long after removal from its native element. In the *Sump*, or fish-box, it will live for a length of time, more especially if the same be placed in clear and slowly running water.

The ide not unfrequently finds a place at the table of the higher classes, and when properly prepared makes a very palatable dish. As with the bream, it is eaten fresh and salted, smoked and *inlagd*, that is, served up cold, as mentioned, in its own gelatine, with vinegar, pepper, &c.

In my vicinity the spawning season of the ide was usually about the end of April or beginning of May, the precise time depending, in degree at least, on the breaking up of the ice. The lek is commonly held in grassy shallows, in the bend of a river or brook; or it may be in a flooded morass, to which access is at times only obtainable by means of a very confined passage. In these their journeys from the

deeps, where they have passed the winter, the ide displays much intelligence as well as strength, and well knows how to avoid the devices contrived by the fisherman for his destruction.

Like the salmon, he will leap over stones, trees, and lesser falls; and when the water is so low as to bar his farther progress, he will throw himself on his side, and in this position force himself forward. When he meets with such impediments, he usually remains stationary for a time, as if to consult within himself as to the best course to be pursued. In the meanwhile he is joined by several of his comrades, and when one of the number has taken courage, and made a start, the rest on the instant follow in his wake. In this manner the fish work their way up the stream, until a suitable spot for their purpose is reached.

The first shoal—for on these occasions they are congregated in vast numbers—that starts for the spawning-ground consists wholly of males. Some few days subsequently, though commonly not until the weather is mild and clear, the females join company, when the lek commences. During its continuance the fish are packed closely together, and lash the surface with their tails, whence arises a peculiar kind of noise. This, however, is not continuous, but quick and short, and is renewed at intervals.

The lek usually lasts for three consecutive days and nights; that is, unless a cold north wind, rain, or storm occurs, in which case matters are postponed until the weather becomes more propitious. In the month of April, Bloch found in an individual of three pounds weight sixty-seven thousand six

hundred small yellow eggs of the size of poppy-seeds. When the lek is over, both the sexes, in company, return the way they came.

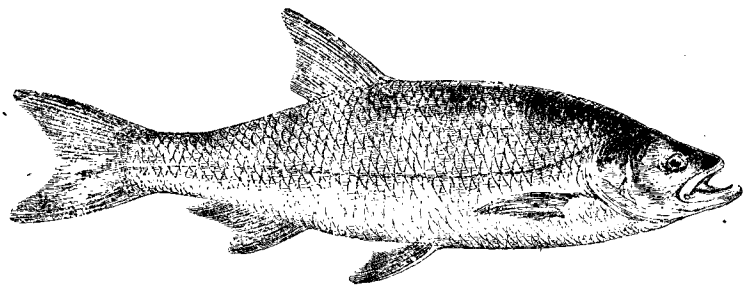
The roe is deposited amongst grass, sticks, &c., and from fourteen to thirty days afterwards, the time varying according to the temperature, &c., the fry make their appearance. Provided the water does not recede, they remain on or about the spawning-ground until the end of August, by which time they are about two inches in length, when they descend the stream in innumerable shoals for deeper water. Afterwards they appear to separate, and live more apart.

The ide is said to be of rapid growth, and, according to Gmelin and Lacepède, able to propagate at the age of three years.

Swedish naturalists tell us that the ide never exceeds five to six pounds in weight; but this is somewhat under the mark, for in my own immediate neighbourhood they have occasionally been taken of seven pounds; and a friend of mine, resident on the Wenern, assures me they have with him attained to eight and even ten pounds weight.

The ide is captured in a variety of ways: by the rod and line, nets, and sundry devices, of which mention will be made hereafter, chiefly, however, whilst spawning. Once, to my shame, I took part in a *chasse* when the fish were thus employed. It was in the night-time, and by torch-light. Having first ascertained the whereabouts of the lek, we drew a net across the stream somewhat below them, and then attacking the fish from above with spears, &c., we drove them towards the toils. As it was we killed a good many—one hundred and ten, I believe—but had our

arrangements been good, which was far from the case, the slaughter would have been much greater, and very few would have escaped us.



CYPRINUS ASPIUS.

Cyprinus Aspius, "Retz. Faun. Suec.," p. 359.
... ... "Nilss. Prod.," p. 28.
Aspius rapax, "Agass. Kröyer," p. 500.

The Asp (*Asp*, Sw.; *C. Aspius*, Linn.), which is altogether unknown to us in England, was common both in the Gotha and the Wenern, as also in all the midland and more northern parts of Scandinavia. Læstadius describes it as plentiful in Lapland; but from the period at which he states it to spawn, I strongly suspect he has confounded it with one or other of the *Coregoni*. What its limits may be to the southward, I know not.

It is a leather-mouthed fish, the scales large, colour whitish, and in shape as well as in some of its habits it is not altogether dissimilar to the salmon tribe.

The most remarkable feature about the asp is the greater elongation of the lower jaw, which, as depicted in the portrait, extends considerably beyond the upper.

The asp inhabits both still and running water; the latter, it would appear, in preference. It feeds not only on worms, mollusca, &c., but on small fish. It is the most voracious of the carp tribe, and is said not unfrequently to chase other fish with such eagerness as to drive its victim as well as itself ashore. When spinning for trout, &c., we not seldom met with it in strong rapids, where it would seize the bait with avidity. It does not survive long after being taken out of the water.

As with most others of the *Cyprini*, it is not in much request in Sweden for the table.

In our part of the Wenern, the asp spawned in April or beginning of May. There was a celebrated lek not very far from Ronnum, at which about one hundred and fifty lispund, or three thousand pounds weight of this fish were taken annually. Of its habits at this period I am in ignorance, as also as to the length of time that elapses before the eggs are hatched, and equally so as to the growth of the fry.

It was curious that no person on the Wenern or the Gotha could point out to me the young of the asp. And this was the more singular, as owing to the remarkable elongation of the lower jaw (possibly, however, not very observable when young), one would naturally have supposed it was readily distinguishable from other fish.

The asp grows to a large size. We ourselves never captured one exceeding twelve to thirteen pounds; but a friend resident on the northern shores of the Wenern assures me that with him it attains to eighteen pounds in weight.

CHAPTER V.

THE ROACH — DOBULE ROACH — CYPRINUS GRISLAGINE — RUDD, OR RED-EYE — BLEAK — MINNOW — CYPRINUS APHYA — COMMON CARP — CYPRINUS CULTRATUS — GUDGEON — SPINED LOCHE — COBITIS BARBATULA — COBITIS FOSSILIS — PIKE — SLY SILURUS — SALMON.

THE Roach (*Mört*, Sw.; *C. Rutilus*, Linn.) was plentiful with us, as also in almost all the waters of Scandinavia, from Scania to Lapland. It is said, indeed, to be found in lakes and tarns situated high amongst the very fjälls of that desolate region. It is also plentiful in the eastern Skärgård, a fact which militates somewhat against the recorded opinion of English naturalists, that "it cannot exist in salt water."

The male is readily distinguishable from the female, not only by the form of the body, which is not so deep in proportion, but by the number of fin-rays. The male has always twelve in the dorsal fin, whereas the female, for the most part, if not always, has thirteen.

The red irides of this fish have given rise in Sweden to the saying: "Rödögd som en mört;" that is, red-eyed as a roach.

It feeds on grass, aquatic plants, insects, worms, &c.

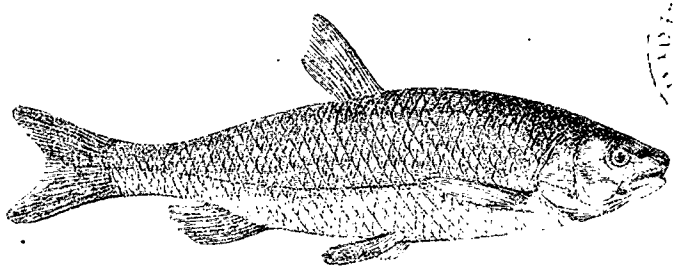
The roach is not in great repute for the table. Much, depends, however, on the water from whence it comes. If from such as is clear, the flesh is white and wholesome; but if, on the contrary, from turbid water, it has, after boiling, a reddish appearance, and a disagreeable odour.

With us the roach spawned about the end of May or beginning of June. The males were the first to arrive on the spawning-ground, where, some fourteen days afterwards, they were joined by the females. At this time the fish are closely packed together, and from lashing the water with their tails, a sort of whizzing noise is created. This, however, is not constant, but ceases, and is renewed at intervals.

The continuance of the lek is in a measure dependent on the state of the weather, but usually it lasts from three to nine days. The female deposits her roe amongst grass, or sticks, against the latter of which she rubs herself, to expedite its removal. She is very prolific. Bloch found about eighty-five thousand eggs in one, although the ovaries weighed less than an ounce. The eggs are vivified at from ten to fourteen days. The fry grow rapidly, and at the end of three years are said to be about six inches long.

In Scandinavia the roach does not attain to any considerable size. I do not remember hearing of this fish

exceeding a pound and a half, which is about the maximum weight specified by Swedish naturalists.



THE DOBULE ROACH.

Cyprinus Dobula, "Linn. and Retzius, Fauna Suecica," 1761 and 1800.
... ... "Bloch," part I, pl. 5.
... ... "Nilss. Prod.," p. 26.
Leuciscus ... "Kröyer," vol. III. p. 463.

Swedish naturalists of the present day, it should be remarked, would seem to negative the existence of the *C. Dobula* in Scandinavia as a distinct species. Ekström considers it identical with the Chub (*C. Cephalus*, Linn.), with which it must be admitted its characteristics in the main agree; and Nilsson, when speaking of it in his "Prodromus," designates it the *Dick-kopp*, signifying thick-head, the name by which the chub is known near Gothenburg. Kröyer also doubts its existence as a separate species in the peninsula.

The fin-ray formula exhibits the distinctions observed between the Dobule Roach and the Chub:

	D.	P.	V.	A.	
Dobula . . .	10	16	10	11	; scales on the lateral line 45.
English chub .	9	15	8	9	; scales, &c., 45.

The dobule roach, or what Mr. Yarrell, who examined several specimens brought from the Wenern, and myself considered to be such, was common as well in that lake as the Gotha.

Of its habits little or nothing seemed to be known in my vicinity, and this from the resemblance it bears to the common roach, with which indeed the fishermen, until the difference was pointed out to them by me, always appeared to identify it. As a consequence, it had no specific name with us; but in the Falkenberg River, which is upwards of one hundred miles to the southward of the Wenern, it is called the *Har-nacke*, or something similar.

In my neighbourhood I only remember seeing it captured in nets, or on night-lines laid out for pike, perch, &c., to which an odd one was at times found appended. But in the Falkenberg River, where ide are also plentiful, it is commonly taken with the fly.

The weight of the dobule roach, according to the fishermen, as well in the Wenern as in the Falkenberg River, seldom exceeded two pounds; but generally it was not more than half that weight.

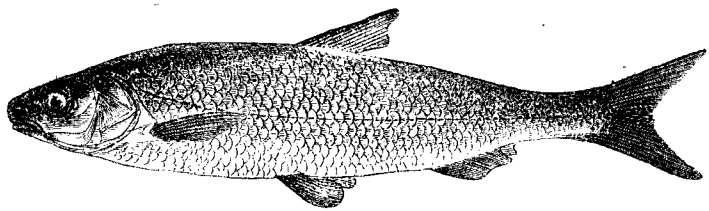
The Chub (*Färna*, Sw.; *C. Cephalus*, Linn.) was, according to Swedish naturalists, an inhabitant of the Gotha, where, as said, it goes by the name of *Dick-kopp*. Unfortunately, however, I was unable to procure a specimen of this fish, before leaving Sweden, to compare with the *C. Dobula* (or what I presume to be such), with the characters of which, as before observed, it in the main agrees. By the description of the fishermen, however, there is little doubt it did exist with us.

It was not until of late years that the *C. Cephalus* was

included amongst the Scandinavian fishes; and Swedish naturalists up to this time imagine it to be confined to certain waters.

It is said to spawn about the end of June; but nothing seems known of its proceedings at the lek, or of the growth of the fry.

Ekström has seen a specimen twenty-two inches in length, and says the greater portion of the fish at the lek weigh from seven to eight pounds; but if the fishermen in my vicinity have not confounded this fish with some other, it attains to a much larger size in the Wenern.



CYPRINUS GRISLAGINE.

Cyprinus Grislagine, "Artedi,"
... ... "Nilsson, Prod." p. 27.
... ... "Scand. Fishes," p. 69, pl. 14.
Leuciscus ... "Kröyer," vol. III. p. 472.

This fish, which with us was called the *Årdrag*, or the *Stafling*, but by Swedish naturalists the *Stämm*, was very common in my vicinity, as well as in all the more northern portion of Scandinavia, even to high up in Lapland. But

with its limits to the southward I am unacquainted. It is also an inhabitant of the eastern Skärgård.

Though following Swedish naturalists, in their designation of this fish, it is no other, I imagine, than our common Dace (*C. Leuciscus*, Linn.). Ekström, indeed, decidedly leans to that opinion; and English Ichthyologists, to whom I submitted several very fine specimens from the Wenern, entertain no doubt as to this being the case.

The following are the fin-ray formulæ of the Swedish and English fishes, in question, taken from specimens, and they show the close anatomical concordance.

	D	P.	V.	A.	
Årdrag . . .	9	16	9	10;	scales on the lateral line 49 to 52; above the line 8, below the line 3.
English dace .	9	16	9	10;	scales 49; above 8, below 3.

This fish, be it *C. Grislagine* or *C. Leuciscus*, is found as well in lakes as in rivers. In the latter it keeps much in the current; and the fishermen in my neighbourhood described it as shy and quick in its movements, in avoiding the net.

The flesh is white, tolerably free from bone, and palatable; but owing to the generally small size of the fish, it is not much sought after.

The spawning season with the *C. Grislagine* was with us at the end of April or beginning of May, in short, pretty soon after the ice broke up.

This fish never attains to any considerable size; six to eight inches being its usual length, and only in one instance have I heard of its weighing a pound.

The peasants in my neighbourhood captured at times great

numbers with the fly, but mostly with bait, of which the best was said to be a grasshopper.

The Rudd, or Red-eye (*Sarf*, Sw.; *C. erythrophthalmus*, Linn.), was common with us, and in Scandinavia generally, as high up at least as the Calix River, which empties itself into the Gulf of Bothnia; but its limits to the northward do not appear to be very well ascertained. It also inhabits the eastern Skärgård.

In England one of the names of this fish is derived from the colour of its eyes; but in parts of Scandinavia they call it the red-fin, as also the red-roach, in consequence of the redness of its fins. But it is only the old males that exhibit great brilliancy of colour. In fact, it is not until the young have attained to the age of a year that their fins are even tipped with red, and it is three years before they in all respects resemble their parents.

The rudd, as has been observed, much resembles in appearance the so-called sjö-ruda; but it is readily distinguished from that fish by the deeper red of its fins, by being thicker, and from having larger scales.

The favourite resorts of the rudd are turbid waters. In spring and summer it frequents grassy shallows, but on the approach of winter it retires to the deeps. It is an inactive fish, and often remains for a long while in the same spot. Except during very warm and clear summer days, it seldom comes to the surface, but for the most part remains near the bottom, embedded as it were in grass and mud. Though readily alarmed, it does not retire far, but quickly hides itself amongst weeds, from which it is no easy matter to dislodge it. It is social in its habits, and seldom found alone, so that when separated from its congeners, it joins

shoals of other species, and this is more especially the case during the spawning season. Hence the saying: "Sarfven i hvar lek," that is, "the rudd in every lek." From its associating thus with other fish, as well as for the reason that no considerable number of them ever spawn together, it has been inferred that the rudd has not a special lek of its own, which notion, however, is altogether unfounded.

The spawning season with the rudd is at the end of May, or beginning of June. The lek, which is carried on in some weedy shallow, is attended with a kind of sucking sound, arising from the fish pointing their snouts upwards, and emitting air bubbles, which burst as soon as they reach the surface. The female deposits her roe amongst river horse-tail (*Equisetum fluviatile*, Linn.) She is prolific, upwards of one hundred thousand eggs having been found in an individual. These, however, do not come from her all at one time, but by degrees. The eggs are vivified in from eight to ten days. The fry are of slow growth, and it is not until the second year that they are believed to be capable of propagating their species.

The rudd does not attain to any great size. Kröyer speaks of fish of near a foot in length, and a pound in weight, but such I should imagine are rare.

The Bleak (*Löja*, Sw.; *C. Alburnus*, Linn.) abounded with us, and this is the case throughout the greater part of Scandinavia, as high up as the sixty-sixth degree of north latitude; that is, within the Swedish territories, for it is said—but with what truth I know not—that it does not inhabit Norway. It is also plentiful in the eastern Skärgård.

The bleak prefers clear, and more especially running water, with a stony or sandy bottom. It is seldom met with in

small forest lakes or tarns, where the strand is grassy and the bottom of clay.

From the comparatively small size of this fish, it is not much sought after for the table; but when fried, it is, as I myself can testify, no despicable dish.

In France, the so-called "Essence de l'Orient," with which glass imitation pearls are coloured, is concocted out of the scales of this fish.

In my vicinity the bleak spawned in June and July. A shallow with a stony or sandy bottom, or, in preference, among fallen boughs, is usually selected. Here the fish collect in such dense shoals, as to form dark masses in the water. During the continuance of the lek, the entire shoal at intervals leap simultaneously into the air, and in their descent lash the surface with their tails, which occasions a noise exactly resembling that of tearing asunder a piece of fine cloth. It frequently happens that many of the fish when thus disporting themselves, fall upon dry land, where they become the prey of birds and vermin.

The bleak is said to have three several leks, though with longer or shorter intervals between them, according to the state of the weather. The old fish always lek first, and the youngest and smallest of all the last. The eggs are deposited amongst stones, boughs, &c. The fry are soon hatched, and grow quickly. The bleak never attains to more than seven or eight inches in length.

The Minnow (*Hund-gädda; Elriza*, Sw.; *C. Phoxinus*, Linn.) was abundant with us, as also, I believe, throughout Scandinavia.

It spawned in the end of June or in July. The lek usually lasts from two to three days. The head of the male at this

time is covered with small tubercles. It is said to be a very prolific fish.

Nilsson includes the *C. Aphya*, Linn., in the Scandinavian Fauna, as a distinct species; but Kröyer is of opinion that it is identical with the *C. Phoxinus*, Linn. All the specimens brought home by me from Sweden, were pronounced by English Ichthyologists to be the latter.

Besides the several species of *Cyprini* mentioned, Swedish naturalists include three others of that genus, in the Scandinavian Fauna, viz.:

The Common Carp (*C. Carpio*, Linn.) is confined almost altogether to the more southern portion of Sweden. But it is not indigenous to the country, though the period of its introduction is unknown. In Denmark, according to Kröyer, this is believed to have taken place about the year 1560.

This fish is very tenacious of life. It is exceedingly prolific. Bloch counted in an individual of nine pounds weight, six hundred thousand eggs, and Schneider in one of ten pounds, seven hundred thousand eggs. It is said to attain to a length of four feet, and a weight of forty pounds.

The *C. cultratus*, Linn., which properly belongs to the more southern and eastern part of Europe, is also included in the Scandinavian Fauna, but it is only a very rare visitant to the waters of the peninsula.

This fish, Bloch tells us, differs from other fresh-water fish, as well in internal as external structure. The back is straight, the belly slender and edged as it were, for which reason it in Sweden goes by the name of the *Skär-knif*, or chopping-knife; in Austria *Sichel*, scythe; in Hungary *Sæblar*, sabre; and in Prussia and Pomerania, owing to its leanness, that of *Ziege*, or the goat.

From being full of bones, and from its meagreness, the *C. cultratus* is not in request for the table.

It is said to spawn in May and June, and to deposit its roe amongst aquatic plants near to the shore. It is prolific. Bloch has counted in a fish of a pound and a quarter, the ovaries of which weighed two ounces and a half, one hundred and five thousand seven hundred and forty eggs.

Northern naturalists do not inform us of the size to which it attains. Bloch merely states that the one from which his drawing* was taken measured one foot and a half in length, and weighed one pound and a half.

The Gudgeon (*Slätting; Sandkrypare, &c.*, Sw.; *C. Gobio*, Linn.). This well-known fish is pretty nearly confined, I believe, to the province of Scania, where it is said to spawn in May and June.

The Spined Loche, or Groundling (*Gadd-Syl, Pigg-Syl*, Sw.; literally goad—, or spined awl; *Cobitis Tænia*, Linn.), was found, though sparingly, in my vicinity; but in parts of the Wenern it is, I am told, very plentiful. According to Swedish naturalists, it inhabits the southern and more midland provinces of Scandinavia, but of its limits to the northward little seems to be known.

This fish, as the name would denote, is armed with a forked and movable spine, situated behind the nostrils, and below each eye, which at the approach of danger it directs horizontally. Hence, it is somewhat of an annoyance to the fisherman, whose feet, when pursuing his avocation barefooted in the summer, it not unfrequently wounds.

The spined loche prefers running water, where the bottom consists of sand or stones, beneath which last it delights

* Page 204, Plate 371.

to hide. This fish is tenacious of life, and like others of the genus, may be kept for a length of time in a tub or glass, provided the water be regularly changed. Valenciennes, who has observed this fish in confinement, says it is accustomed so to conceal itself in the sand, that only the point of the snout, the eyes, and a small portion of the forehead are visible. If touched, it retires from view for a time, but soon reappears at the same spot. Should it, however, be touched several times, it moves off altogether, and when it shows itself again, it is at some distance from the former place. Unlike the *C. fossilis*, it does not remain long in any one spot. Bloch mentions that it moves its lips like a rabbit.

It is reputed to be a voracious fish, feeding on worms, the roe of fish, small fry, and other minute aquatic animals.

Its flesh is said to be lean and tough, and it is seldom used for food.

According to Kröyer, the spined loche spawns in April and May, and the lek is held in the deeps.

Valenciennes tells us the largest he met with was four inches in length; but Bloch's drawing, on the contrary, would make it out to be five inches, or upwards. The specimen in my own possession is less than four inches.

Swedish naturalists include the *Cobitis Barbatula*, Linn., amongst tne Scandinavian fishes; but the information they give us is very vague: they merely say it is found in stony rivers, and is very scarce. According to Linnæus, this fish was introduced from Germany into the Lake Mälaren, by King Frederick I. of Sweden.

The *Cobitis fossilis*, Linn., would not appear to inhabit the peninsula; for though Kröyer includes it in

the Danish Fauna, no mention of it is made by Swedish naturalists.

The Pike (*Gädda*, Sw.; *Esox Lucius*, Linn.) was abundant with us as well in the Gotha as the Wenern. It is common also throughout nearly the whole of Scandinavia from Scania to Lapland. We read, indeed, of its being found in the lakes and tarns of that wild country beyond the limits of arboreal vegetation, or at least of the birch-tree. It is likewise plentiful in the eastern Skärgård. But that salt-water is not its proper element, may be inferred from the fact that these fish diminish both in size and number, in proportion as they approach the open sea, where they are no longer to be found.

In my vicinity, the spawning season of the pike was in April and May. The lek is usually held in shallow water, with a weedy and muddy bottom, or it may be in a flooded meadow. It lasts for a considerable time, from the circumstance of there being two to three separate leks. Contrary to the usual habit of fishes, the young pike always lek first, then the middle-aged, and lastly, the older and larger fish.

There is a tradition among fishermen in the midland provinces of Sweden, which has been handed down from time immemorial, and which is still believed, that on St. Gregory's Day, the 12th of March, the pike first turns his head towards the shore, and that on St. Gertrude's Day, the 17th of the same month, he leaves the deeps where he has passed the winter, and makes his approach towards the land. The first lek takes place before the ice is fully gone, and the fish engaged in it are in consequence called Gertrude—, or Ice-pike. When this first lek is over, by which time the ice has disappeared, the second lek begins; and as it occurs just at

the time that frogs (*Rana temporaria*, Linn., called by the country people Glossor,) are pairing, the fish taking part in it are designated *Gloss*—, or frog-pike. The third and last portion, or those which appear on the spawning-ground after all the others have moved off, and when the trees are in leaf, or partially so, bear the appellation of *Blomster*—, or blossom-pike.

The proceedings of this fish at the lek are by all accounts somewhat curious. The female (always larger than the male) first makes her appearance, and is followed by two to three, and occasionally by four males. She takes to such very shallow water, that when calm, a ripple caused by her movement may be observed on the surface. Sometimes indeed her back-fin, or tail, is seen above it. As soon as she becomes stationary, the males approach and surround her, one on each side; and if there are more than two in company, one stations himself under her tail, and the other above her back. These rub themselves against the body of the female, who in the meantime remains passive, only moving her fins. After a while she makes a plunge, separates herself from the males, and shoots forward to another spot, where the same proceeding is re-enacted. During this time she deposits amongst the grass her yellowish and somewhat large roe, which is impregnated by the milt of the males. From a pike of six pounds weight, one hundred and thirty-six thousand eggs have been taken, which number, however, on the average does not exceed that of other fishes. The eggs are hatched after a period of from twenty-five to thirty days, and the growth of the fry is rapid.

Pike of a very considerable size were very often met with in my vicinity. The largest caught by myself, however, did

not exceed seventeen pounds in weight; but more than one fish of twenty-five pounds weight was captured by my people. During my stay in Sweden, I never heard of any weighing more than fifty pounds, and these were caught in the Wenern, a fact which, considering the great size of some of the lakes, and knowing that heavier fish have been met with in Britain, surprised me. That monsters, however, do exist in the Scandinavian waters, I have no doubt. A fisherman at Frugård assured me, for instance, that in 1848 he had a pike on his night-line, which certainly was four feet in length, and could not have weighed less than eighty pounds. Five several times he had the fish up to the gunwale of the punt, but owing to the line getting entangled, it at length broke its hold and escaped. Another peasant affirmed to me that, when on one occasion he was spearing fish by torch-light, he fell in with so immense a pike, resembling, as he said, the trunk of a tree, that he was actually afraid to attack it. Though there may be exaggeration, there is probably much truth in these and similar relations, of which hundreds are in circulation.

A notion prevails in Sweden, as observed in the "Northern Sports," that at certain times the pike, from the peculiar state of its gums, is incapable of feeding in its usual mode, if even at all. Since that work appeared, M. Ekström has favoured us with some remarks on the subject, the substance of which may not be without interest to the naturalist.

Fishermen, in general, he tells us, believe that the pike at certain periods is altogether disinclined *att taga svalg*, that is, to gorge the bait; and that at others, on the contrary, he is more than usually voracious. These periods occur regularly, so that an observant person is thus enabled to

foretell when the fish is, as the saying goes, *i taget*, or in taking humour. But the periods in question are not supposed to occur at the same time every year; and it is said to have been noticed that they are dependent on the termination of the spawning season; for in the particular change of the moon, whether new or full, in which this ceases, in that same change the pike will not *taga svalg*, or gorge the bait. To this rule, however, the *Röt-månad**—nearly answering in point of time to our "dog-days"—is an exception, for he is then at all times *i taget*. The cause of these periodical fits of abstinence in the pike are ascribed to the circumstance of its gums then becoming so swollen, that the teeth hardly protrude beyond them, and consequently the tenderness of his mouth places bounds to his usual rapacity.

Another singularity in this fish is, according to Ekström, that even when he has swallowed his prey, he, by the simple construction of his stomach, can disgorge it at pleasure, a fact with which every one may not be acquainted.

That the pike is a very voracious fish every one knows, but that he should carry his gluttonous propensities to the extent described by my friend, M. Wærn, is perhaps new to readers in general.

"I have kept pike and trout," that gentleman tells us, "in a pond that was supplied with running water. The pike for the most part remained stationary, but the trout, on the contrary, were in constant motion. On a particular occasion, I saw a pike of from seven to eight pounds weight

* Literally the month of decay or rottenness; so-called probably, in consequence of the intense heat producing epidemics, destroying provisions, &c.

make a dash at a trout of fully equal size to itself, and seize it across the body with his sharp teeth. The combat was lively. The assailed trout made desperate though ineffectual efforts to get rid of its ravenous enemy. After the lapse of a couple of hours, the trout became altogether exhausted, on which the pike, beginning with the head, commenced gorging his prey. The meal lasted three whole days, or rather, it was not until the expiration of that time, that the pike had succeeded in swallowing the whole body. The process of digestion must have continued very much longer, as for a week afterwards the fish had a very swollen appearance, and was hardly able to move from the spot even when poked with a stick."

Baron C. J. Cederström was also eye-witness to extraordinary voracity in the pike. After relating the results of some experiments made with the young of more than one species of fish, he says:

"On the 12th of June, after the larger portion of the fry were preserved in spirits, there remained four young pike—namely, two of about twenty, and two of some twenty-six millimetres in length. That I might be the better enabled the next day to witness the amusing spectacle afforded by their gluttony, they were left without food, and a covering was, as usual, placed for the night over the vessel in which they were kept. At five o'clock on the following morning, when I removed the covering, they were all there; but one quarter of an hour afterwards, when I again inspected their place of confinement, one of the larger of them had swallowed its somewhat smaller comrade, or rather, it had partially gorged it; for the half of the body, which moved for a second or two, still protruded beyond the jaws of the assailant, who was shapeless, and obliquely distended. In the highest degree

astonished at what had happened, which previously I had considered impossible, I remained perfectly quiet for a time, and in the course of a few minutes saw the manner in which the remaining two cautiously watched each other, and waited for an opportunity of making an onset. The larger presently made a charge at the smaller one, which the latter avoided by its dexterity, and then only retired for a short distance. A second attempt, however, made shortly afterwards, succeeded perfectly well. The two victors, who had preyed on their brethren, then paraded separately about the vessel, gorged to bursting with their copious meal. In the course of a couple of hours the exposed tails of their swallowed companions had disappeared."

The Sea-eagle and the Osprey, as said in my former work, not unfrequently pounce down upon a fish when basking near the surface of the water; if too heavy for them to bear aloft, it not unfrequently happens that, unable to extricate their claws, they are carried under water and drowned.

The Rev. M. Möller, rector of the parish of Mellby, in Westgothland, informed me that, one misty morning, when he was engaged in taking up a night-line, he heard at a little distance a very great disturbance in the water; on rowing to the spot, he found to his surprise that it arose from a combat between an eagle and an immense pike, for the bird, which had made a stoop on to the fish, was neither able to disengage its talons, nor to bear the fish aloft. The clergyman had no gun unfortunately, but seizing hold of a stout stake, he was about to deal a death-blow to the belligerents, when by a desperate effort, the pike not only managed to clear himself from the hook to which he was attached, but

to dive to the bottom, bearing his feathered antagonist on his back, and neither the one nor the other of them were ever more seen by the reverend gentleman.

Magnus, the Trollhättan fisherman, was a witness, he himself assured me, to a similar scene.

An Osprey had pounced upon an enormous pike, which from its great weight it was unable to bear aloft, and from which it was unable to extricate its talons. At times both the fish and the bird struggled together on the surface; whilst at others the pike fairly carried the osprey under water, the bird, on its reappearance, uttering the most plaintive cries. Being in a boat, and provided with a fish-spear, he lost no time in giving chase, in the hope of capturing one or both; but before reaching the spot the pike, to his great disappointment, so completely gained the upper hand, as to carry the osprey with him bodily under water.

On the occasion of these conflicts, it however at times happens that the strength of the belligerents is so equally matched, that neither party can claim the victory, and the battle ends by the death of both.

"An inlet, called Morviken, of Norra Dalsjön, in the province of Helsingland," so we lately read in the public journals, "was recently the theatre of the following occurrence:

"The most powerful plunderer of the air, the eagle, pounced upon the most powerful plunderer of the water, the pike. The former, however, had so badly calculated his strength, that the attempt was a failure. The fish was stronger than the bird, so that the latter was near being drawn under water, and of becoming himself a poor prisoner in the liquid kingdom of the fishes. He was neither able to fly away with the heavy pike, nor to release himself, his

talons being too deeply embedded in the body of his intended prey. Giving utterance to the most dismal cries, king eagle floated with outspread wings on the surface, a pitiable living wreck. Nevertheless, no one of his subjects in the air came to his assistance. A man, however, standing on the shore, who had witnessed the scene, hurriedly launched his skiff, rowed to the place of conflict and with determined will and strength of arm plunged his fish-spear into the eagle's breast, thus capturing both him and his intended booty.

"The eagle, nailed up in front of a stable-door, near to Morvik foundry, is still to be seen; but the pike, which weighed fifteen pounds, supplied a good meal to the family of the bold fisherman, instead of being borne off to the eyrie of the royal bird."

It was farther stated, in my former work, as not of unfrequent occurrence for the pike to be found, not only dead, but *living*, with the skeleton of the eagle or the osprey still attached to its back. This story has not, I fear, found much credence in England; so at least it is to be inferred from the notes of admiration attached to it when quoted by the late talented author of "Wild Sports of the West," a work which, to my regret, has only very recently come under my notice. That it is a true tale, however, I myself doubt not, and I subjoin statements furnished to me by friends and others, which will go far, I imagine, to set all doubt upon the point at rest.

"The strength he possesses," says M. Ekström, when speaking of the pike, "is not inconsiderable. On the back of one of these fish, not exceeding twenty pounds in weight, I myself have found the skeleton of an osprey (*Falco Haliæ-*

tus, Linn.), which he had drawn under the water and suffocated."

The Rev. M. Möller, informed me, moreover, that he himself, on one occasion, had taken a moderately large pike, with the skeleton of a kite, or large hawk, still attached to it.

"Again, in the lake Wettern in Eastgothland, as also in that of Ringsjön in Scania," so said Dr. Willman, "pike have been caught with the skeleton of an eagle on their backs. The one taken in the Wettern had for a number of years exhibited the skeleton above the surface of the water; and the fishermen, who believed it to be the harbinger of misfortune, always, when aware of it, made for the shore as quickly as possible. The flesh having rotted away from the bones, the skeleton had assumed a greenish hue, probably in consequence of some algæ, or the like, with which it was overgrown, causing it at a distance to resemble a bush."

"My brother, Captain Axel Westfeldt, Lieutenant J. Lekander, and the fisherman Modin," writes a friend, on whose word I place every reliance, "were one day fishing with *Lång-ref*, that is a line of great length, with several hundred hooks attached—of which more presently—in a large lake in Fryksdal, in Wermeland. When they had proceeded a considerable distance from the land, Modin suddenly pulled the boat right round, and in evident alarm commenced rowing with all his might towards the shore. One of the party asked the man what he meant by this strange conduct? 'The *Sjö-troll*, or water-sprite, is here again,' replied he, at the same time pointing with his finger far to seaward. Every one in the boat then saw

in the distance something greatly resembling the horns of an elk, or a rein-deer, progressing rapidly on the surface of the water. 'Row towards it,' exclaimed Lekander; 'the deuce take me if I don't give the *Sjö-troll* a shot; I am not afraid of it.' It was with great difficulty, however, that Modin could be prevailed upon once more to alter the course of the boat, and to make for the apparition. But at length the man's fears were partially allayed, and the chase commenced in good earnest. When they had neared the object sufficiently, Lekander, who was standing, gun in hand, in the bow of the boat, fired, and fortunately with deadly effect. On taking possession of the prize, it was found to be a huge pike, to whose back the skeleton of an eagle was attached. This fish, or rather the bones of the bird, had been seen by numbers for several years together, and universally went under the above designation of *Sjö-troll*."

The Sly Silurus (*Mal*, Sw.; *Silurus Glanis*, Linn.), one of the largest of fresh-water fishes, though not to my knowledge found in the Wenern, is pretty common in several of the lakes in the midland and more southern parts of the Scandinavian peninsula. Formerly it existed also in one or more of the Danish lakes, where it is supposed to have been introduced by the monks, but where it is now believed to be extinct. It is common in several European countries, and though properly a fresh-water fish, has been captured at times in brackish, if not in salt water.

Through the indefatigable exertions of Mr. George D. Berney, of Morton, Norfolk, the silurus was last year introduced into England, and consequently is now included

in our Fauna; therefore a passing notice of this fish may not be unacceptable.

The Silurus,* which is not altogether dissimilar in appearance to the burbot, is said to be slow in his movements, and inert in disposition. For the most part he lurks in holes, or under fallen timber, &c., at the bottom; and would rather seem to lie in ambush for his prey, than to seek it. "The structure of his body is such," Bloch tells us, "that other fishes approach him without being aware of his presence. He is of a dull colour, and has no brilliant scales to betray him, from which cause he is hardly to be distinguished from the mud itself."

During tempests and thunder-storms, the silurus evinces great inquietude, and quits the deeps. It is said, indeed, that it is only on such occasions the larger individuals are captured. According to Holm, who flourished about the year 1777, he keeps to the deeps until April, when he approaches the shoals, and in the beginning of August retires again to his usual haunts. "During warm summer-days," Holm farther tells us, "this fish is often seen near to the surface, particularly during drizzling rain. If the sun be powerful, he is said to conceal himself, more especially his head, under aquatic plants, or amongst reeds, rushes, &c., and at such times to be more than usually sluggish (the female more so than the male), so that he can then be readily captured. The silurus is rarely found alone; but more than three or four, and those of about the same size, are nevertheless seldom seen together; and when thus congregated, they seek their prey in company."

The long barbules with which the mouth of this fish is

* "Bloch," p. 194, pl. 34.

provided, are in perpetual motion, and although they can be directed at pleasure on either side, or downwards, are generally inclined backwards. Kröyer imagines "these barbules, which are provided with a large nerve, serve the fish as organs of touch when searching for worms and other food in the mud at the bottom, and perhaps also to give him intimation of the approach of his prey." But Bloch, on the contrary, tells us, "that in his opinion they are for the purpose of attracting other fishes; for when he plays them about, the fish take them for blades of grass, and when his dupes approach within reach, he pounces on them."

The silurus is a very voracious fish, and not only devours other fishes, even those the best armed (as for instance, the pike and the perch), but aquatic birds. He feeds also on carrion, as is proved by his taking the hook when baited with tainted fish or meat; and (though perhaps unjustly) is charged with attacking the human species. Aldrovand speaks of a silurus near to Presburg, that devoured a child who was bathing, and says that the fish was captured shortly afterwards, when the remains were found in his stomach. The more probable solution of the story, however, is, that the poor child was first drowned, and that the silurus subsequently preyed upon its body.

Opinions seem divided as to the value of the silurus as food. Pontoppidan calls it a *Herre Fisk*, which may be rendered: "a fish fit for a gentleman;" and Holm remarks, "that in consequence of its scarcity, it is reserved exclusively for the royal table." But, he adds, that "the flesh, in the opinion of himself and some others, is not very palatable; as

also, that in consequence of its oily nature it cannot be considered as wholesome or digestible." The flesh is white, soft and luscious, and although very inferior to it, more resembles that of the eel than any other fish. In some places the fat is used instead of lard. Isinglass is prepared from its swim-bladder.

The silurus, as is the case with other fish that live at the bottom, is very tenacious of life, and will survive long after being taken out of the water if placed in wet grass.

It spawns about midsummer, amongst reeds, &c. Bloch tells us he has found seventeen thousand three hundred small greenish-coloured eggs in a fish of three pounds weight, and that the fry appear even as early as from the sixth to the ninth day. The young are of slow growth. The old story of the male guarding the female, and the young afterwards, seems now exploded.

The silurus attains to eight feet or upwards in length. Richter speaks of one captured near to Limritz, in Pomerania, which had a mouth so large, that it could easily have taken in a child of six to seven years old; and that he himself has seen one lying on a *charette*, or kind of cart, that was longer than the vehicle itself! According to Kramer, they are found in the Danube, weighing more than three hundred pounds, with a girth that two men cannot span. Bloch tells us, indeed, that in 1761, an individual was taken at Writzen, on the Oder, of which the salted flesh alone filled two barrels and a half, each barrel ordinarily weighing three hundred pounds; so that this fish, sinking the head, entrails and fins, must therefore have weighed seven hundred and fifty pounds!

The strength of the silurus, which lies chiefly in its tail,

is so great, that a blow of it has been known to upset a small fishing-boat.

This fish is believed to attain to one hundred years or upwards. Its enormous size, and slow growth, make this very probable, but certain proofs of the fact are wanting.

The young silurus takes the hook freely when baited with insects, &c., and when in confinement, may be fed either on fish or vegetable matter.

The Salmon (*Lax*, Sw.; *Salmo Salar*, Linn.) was abundant in the Gotha during the season, but not higher up than the deep pools immediately below the magnificent falls of Trollhättan (unless, indeed, a chance one made its way through the twelve or fourteen sluices at that place, a thing little likely to happen), their great height opposing an insurmountable barrier to its farther progress. The salmon is also very common in all the Scandinavian rivers from Scania to Lapland, as well in those falling into the Baltic as in those which discharge themselves into the North Sea and Cattegat. The fish found in the streams flowing to the westward, however, according to Swedish naturalists, are the fatter of the two, which if really the case, is properly attributable to the superior saltness of the water.

The salmon is readily attracted by bright objects, and hence the adoption of the torch during the night-time, to beguile him to his destruction. The Norwegian fishermen, taking a hint from this known fact, therefore suspend sheets, or whitewash the rocks in the vicinity of the nets, or instead of rocks erect white boards, called *Laxe-blikke* (freely translated, salmon attractors), thereby to represent

the foam of the cataract of which they presume him to be in search.

In the same ratio as white attracts the salmon, red, on the contrary, according to Pontoppidan, is the object of his greatest antipathy; so that in parts of Norway the fisherman never ventures to follow his vocation, attired either in jacket or cap of that colour. The learned Bishop makes mention, moreover, of an individual who was so deeply impressed with the truth of this assumption, as to remove the red tiles from the roof of his house, and to substitute others in their place, of a more sombre hue!

The salmon is believed to be afraid of shadows; even that of a bird on the wing will send him from the surface. When swimming along the coast of Norway, if he should come to a spot where a lofty mountain casts its shadow over the water, he retreats, we are told, with precipitation; while, on the contrary, he seeks places where light is spread over the sea, whether coming through the outlet of a fjord, or an opening in the mountain range: facts of which the fisherman does not fail to take advantage, when placing out his nets.

The speed of the salmon is very considerable. "During the continuance of the westerly or north-westerly storm that drives him into the Randers-fjord" (which lies nearly east and west)—so we are told by Faith, who for fourteen years was the proprietor of Frysenvold's salmon fishery, situated on one of its tributaries—"he, keeping to the deeps, goes vigorously forward, and it takes scarcely four hours for him to make his way from the sea to a certain fishery, a distance of six Danish, or twenty-eight English miles. The speed of the fish is, however, greatly regulated by the wind;

for if soon after his entrance into the fjord, or the river, as the case may be, the wind suddenly changes to the east or south, he greatly slackens his pace, or remains altogether stationary."

"One may predict by the salmon twenty-four hours previously," Faith goes on to say, "if a storm from the west or north-west is at hand, for in that case its upward progress is very rapid."

"It is deemed a condition for the ascension of this fish up the fjords and rivers," he tells us, moreover, and the remark applies to Jutland generally, "that the wind should blow off the land: whence such a wind is in some places called a *Laxe-vind*, or salmon-wind."

"The salmon," Faith further informs us, when speaking of Rander's-fjord, and his remarks are curious, "shows himself only during certain hours of the day at the fishery —namely, in the morning from five to six, again from eight to nine, and from eleven to twelve; in the afternoon from five to six and from eight to nine; at night from eleven to twelve, and from one to two. Between the hours specified he is captured either within or near to the fishery. During the intervening period he without doubt lies still, or seeks for a passage elsewhere. He dreads a thunder-storm, and should one arise during the periods of his ordinary coming, he does not show himself at all. Should several salmon be seen for some days together outside of the fishery, without its being practicable to capture them, and that other salmon should arrive in the interim, these different groups do not associate until after the lapse of a day. If one be taken, it is evident the rest look out anxiously for their missing companion;

and should several be captured, the restlessness of the remainder is on the increase. If only a single one remains, he rushes to and fro with anxious rapidity, until he himself becomes a prisoner."

With us in the Gotha, the salmon spawned at the end of October or beginning of November; for when captured with the rod in the early part of the former month—and I never fished later—the roe appeared mature, and the milt of the male was fluid. Nilsson, in corroboration, also names October; but according to Danish authorities, the lek of this fish in Jutland occurs at a much later period, even so late as the month of February, or beginning of March.

The Scandinavian salmon attains to a large size, but I never heard of any captured in the peninsula at all comparable to Mr. Grove's famous fish, which he himself told me weighed eighty-three pounds.* With us in the Gotha it was said to be sometimes taken of from fifty to sixty pounds in weight; and this I can well believe, from the monsters—more resembling porpoises than anything else—that I myself have occasionally seen in the pools below Trollhättan. Nilsson speaks of seventy pounds (Swedish weight, be it remembered, which is six per cent less than the English) as the maximum of this fish; but I doubt if the capture of so large a one is on record.

Before concluding my observations on the salmon, it may be proper to remark, that when in the "Northern Sports" I spoke of the *S. Salar* as an inhabitant of the Wenern and

* For the information of M. Kröyer, no other than avoirdupois weight is used for common purposes in England. Troy weight is confined to chemistry, gems, and the precious metals.

its tributaries, I was decidedly in error; for to say nothing of the all but impossibility of that fish getting up the Falls of Trollhättan, I have since ascertained that the fish in the lake of the genus *Salmo* are no other than huge trout.

I was partly led into the mistake by the Swedish naturalists telling us, that the *S. Salar* constantly inhabits some of the larger of the Scandinavian lakes; partly also from every one calling it the *Lax*, or salmon; and from not having sufficiently examined the specimens that came in my way—none of which indeed were anything like full-grown, and of course had not the same marked characters as the adult. The law, moreover, classed the fish in question as *Lax*, or salmon, in contradistinction to the *Lax-Öring* or trout, people being permitted to kill the latter at all seasons, whereas the former, at a particular time of the year, is protected by law.

CHAPTER VI.

NATURAL HISTORY OF THE SALMON.

THE natural history of the Salmon tribe having of late years excited much interest in England, I cannot do better than to devote a chapter to some remarks, the result of an attentive study of their habits for several consecutive years, recorded by my gifted friend and countryman, Mr. Alexander Keiller; observations which, I doubt not, will be interesting even to the unscientific and general reader. They were made by that gentleman during a long residence on the Save, a tributary of the Gotha, and at a distance of from fifteen to twenty miles from the sea, and he saw everything to peculiar advantage—the Save at Jonserud, where the observations were made, being *invariably clear*. That river, which is of a moderate breadth, has its rise far up the country; during its course it passes through a chain of large lakes, the last of which, the Aspen, is immediately above the mansion, and

all matter, therefore, brought down from the interior, is deposited in that extensive sheet of water.

THE OBSERVATORY.

Mr. Keiller's observations are the more worthy of notice, as for the better elucidation of the subject, he caused a small moveable observatory, as depicted above, to be erected over the stream, where he spent many hours daily, watching the movements of the salmon.

I give the substance of my friend's words from verbal communications made to me at various times; and I also subjoin some valuable drawings made by himself, which tend greatly to explain his facts as well as his theories.

Salmon, he says, are pretty abundant in the Save. The fishery produced, including grilse, about three thousand pounds weight annually. Many fish were taken in weirs, others in nets, or by the rod. The larger salmon always appear first in the spring; as the summer advances, the fish are much smaller; but in the autumn heavy fish again show themselves. These are not *fresh run*, however; at least they are somewhat discoloured, from which it is to be inferred they have been lying either in brackish water, or in the deep pools below.

The common trout is exceedingly scarce in the Save, that is, at Jonserud; but at some distance higher up the stream it is abundant.

During the autumn there are numbers of the sea-trout, and some of considerable size. These fish, as well as the common trout, spawn in the Save about a month earlier than the salmon, and carry on proceedings in a precisely similar manner to that fish. Both, however, have deposited their ova prior to the salmon commencing operations, thus showing a wonderful economy of nature; for otherwise the milt, both of the sea—and of the common trout, would generally impregnate the ova of the salmon, and numberless hybrids would be the result.

The fry both of sea-trout and salmon are, in the Save, at Jonserud, indiscriminately designated *Forell*, answering, it is to be presumed, to the so-called Parr. Both kinds, no doubt, go to the sea about the same period.

Salmon commence spawning in the Save the first days in November, and continue throughout the month. The female deposits her eggs in comparatively still, shoal water, from six to eighteen inches in depth, immediately above a rapid.

She selects such a situation for the following reasons: Comparatively still water in preference to a current, because otherwise the exertion of retaining her position, and spawning combined, would be too much for her powers; a shallow, instead of a pool, that she may be secure from the sea-trout and other fish, which, if in deep water, would congregate about her to prey upon her eggs; and lastly, that her ova, on dispersion, may be carried by the gentle stream to a secure resting-place amongst the stones below.

It is commonly supposed that, in conjunction with the male, the female salmon scrapes a hole, or furrow, in the bed of the river, in which to deposit her eggs, and that afterwards, and as a protection from their numerous enemies, they cover them over with gravel; but such is not the fact, at least in the Save. The male has nothing to do with this part of the work; and the ova, instead of being dropped into a cavity, are deposited on a comparatively smooth surface.

Whilst in the act of spawning, the female retains her natural position. Her belly is near to the ground; at times, indeed, probably to rest herself, actually touching it. The process of dropping her eggs appears to be slow. When a few are collected, she turns on her side, waves the flat of her tail gently downwards to the roe, but lifts it up again with great force, by which such a vacuum is caused, as not only to raise the eggs from the ground, and thus to distribute them in the stream, but to throw up a mass of dirt and stones, the latter not unfrequently of very considerable weight.

As the mere distribution of the ova would require only a slight wave of the tail, it appears that the violent lunge is for the express purpose of disturbing and muddying the

water, thereby to conceal the eggs, in degree at least, from their numerous enemies lying in wait below.

When spawning has once commenced, it seems that the male can no longer retain his milt, nor the female her roe, the emission continuing under all circumstances. This has been often noticed, even long after death.

The female salmon leaves the spawning-bed many times during the day, and makes little excursions about the river, generally into the dead water above. At times these trips are somewhat extended—say to a distance of some seventy or eighty paces. "But," said Mr. Keiller, "as from my elevated position I could watch all her movements, I feel perfectly confident that, during her absence from the spawning-bed, she never in any way comes in contact with the male fish. I am at a loss to understand the cause of these trips. At times, I have thought it is for the purpose of resting herself after the fatigue or exhaustion of spawning; at others, I have imagined it to be a special provision of nature; for if her original position were a bad one, and she were to remain stationary, all her roe would be destroyed; whereas, by occasionally moving, as she does, about the stream, and dropping her eggs as she goes, some of them, at least, are pretty certain to find shelter."

The specific gravity of the roe is but little greater than water; when once therefore in motion, unless intercepted, it will float a considerable distance down the stream. A large portion of the eggs are of course devoured; but the remainder find their way into crannies, and under stones inaccessible to an enemy.

From the slow manner in which the salmon spawns, it might be thought on the first view of the subject that a

large portion of the eggs in the body of the fish were in an *immature* state; but such is not the fact. To prove this, Mr. Keiller once took the roe in a mass from the belly of a salmon recently captured, divided it transversely into three equal parts, and applied to each the needful quantity of milt. In due time the several portions produced fry, though it is true that the portion taken from the upper part of the belly where the eggs were of a somewhat less size, was less productive than the other two.

So far as Mr. Keiller's observations extended, the salmon never spawns on the bare rock, or amongst very large stones, for the reason, that in such situations she would be unable to raise the needful turbidity to conceal her progeny.

At the tail of a spawning-ground, the work of a single salmon—or at all events never occupied by more than one at a time—there is, towards the close of the season, an immense accumulation of gravel, stones, &c.—occasionally, indeed, a good English cart-load. What with ice and floods, however, not only is this heap in great part carried away, but the very cavity from whence it came, often of great extent, is so filled up, that by the succeeding summer the bed of the river has assumed nearly its usual appearance.

"What may be the case in the earlier part of the season, when the fish are in the pools or in deep water, I could not affirm," said my informant; "but after the female commences spawning, I have never, but on one occasion, seen the male in actual company with her. His station at that time is at six or seven feet distance, directly in her wake, and just beyond the heap of stones spoken of. And the only apparent part he takes in the generative process, is by the deposition of his milt, which of course becomes

mixed with the ova of the female, as the stream drifts them past him.

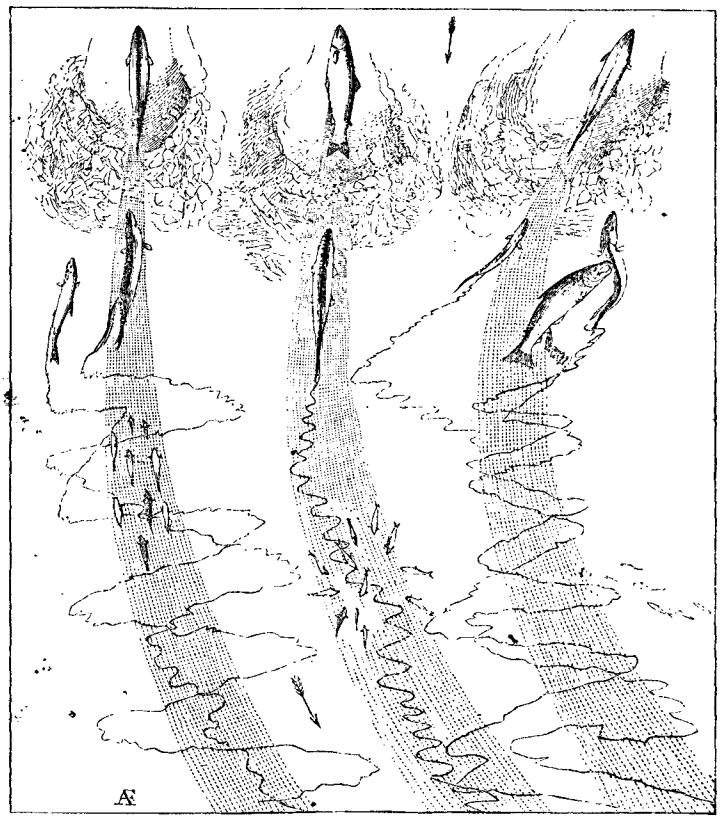
"The exception noticed occurred thus: the female was lying on the spawning-ground, when suddenly the male, which had previously been at some little distance, swam up, and laid himself immediately alongside of her. Although their proceedings were most carefully watched, nothing that could be construed into sexual intercourse took place between them; nor did either fish in any way alter its swimming position; but a vibration or champing of the jaws of the male was distinctly remarked whilst he was by her side. This the observer was enabled to distinguish, in consequence of the dark colour of the fish contrasting with the lighter colour of its mouth when opened. The vibration continued for a second or two, when the male left the female and retired below."

It has been shown that whilst the female is spawning, the male is stationed some few feet in her rear. Again, at a respectful distance behind him—say twelve or fifteen feet, but still in a direct line with the female—a lot of trout, sea-trout, and other fish, are always posted, in readiness to pounce on the eggs, when the female starts them adrift with her tail. On the appearance of the several clouds of dirt, it is amusing to see them all scurrying into the thick of it, and following the ova down the stream.

It has never been observed that the female has a liking for one male more than another; but it has been repeatedly noticed that some one male in particular occupies the same spot.

At some little distance to the right and left of this male, two or three other males are usually to be seen, and much of his time is occupied in keeping these interlopers at a

distance. His charges against them are most vigorous and determined, and so frequent that he is seldom stationary for a minute together. This almost incessant motion of the male seems a special provision of nature; for were he to remain still, only that portion of the ova which passes over him would be impregnated, whereas by moving so much about, his milt becomes distributed, in a manner, over the whole stream.



PROCESS OF SPAWNING.

The above illustration represents three pair of salmon in the spawning season. It must be borne in mind, however, that though three pair are depicted in their spawning-beds, it is only to save other illustrations; for it seldom happens that more than one pair of fish, as regards the Save at least, occupy the breadth of the stream.

The pair to the left—the female passive, the male casting a jealous glance at an interloper. Second pair in the centre —the female on her side, in the act of distributing her ova, the male passive, and the fry revelling in the passing cloud. Third pair to the right—the female passive, the male seizing a poacher on his manor, in which interval it will be observed an intruder takes advantage of the liege lord's absence, and is about assuming his place. The zig-zag lines represent the manner in which the milt of the male salmon, according to his peregrinations, becomes distributed over the whole river.

As is well known, the jaws of the male salmon during the breeding season are much elongated by the growth of a cartilaginous projection from the extremity of each. That on the lower turns upwards, and when the jaws are closed occupies a deep cavity or socket between the intermaxillary bones of the upper jaw.

The anatomical construction of these extraordinary elongations is curious. The lateral longitudinal surface of the hook on the lower jaw is greater than that in front, thereby giving it more strength, and at the same time offering less obstruction to the flow of the water into the gills or lungs, during respiration. And from the hook inclining backwards at the top, it beautifully facilitates this end.

The upper snout is hollow or vaulted. This cavity would

also cause hindrance to the free flow of water to the lungs, were it not for a web, forming a sort of hanging ceiling, attached in front and at the sides to the jaw, but open in a parabolic form behind. This vault is so large in a twenty-pound fish, that between it and the hanging ceiling the finger may be inserted from behind, nearly up to the second joint.

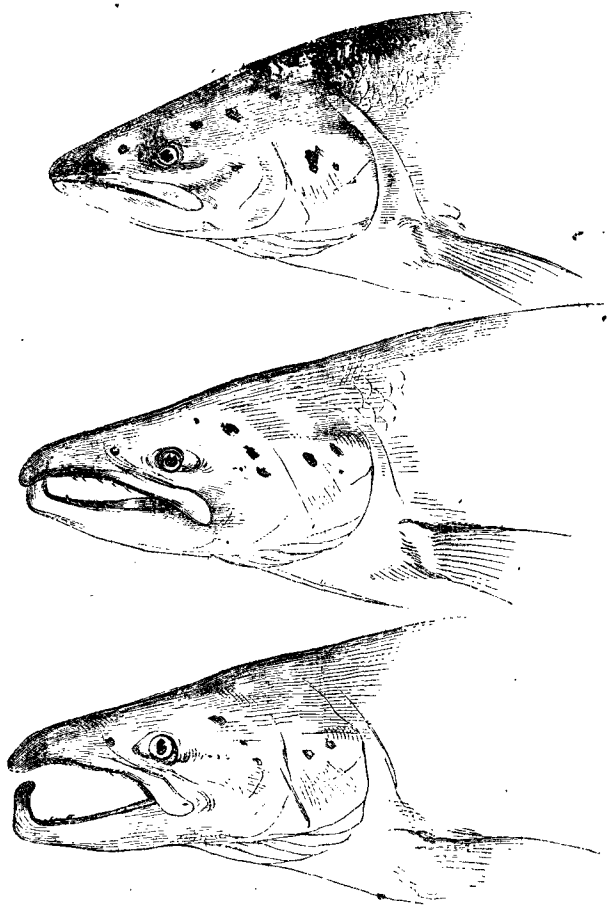
After the termination of the spawning season the protuberances on both jaws are gradually absorbed, and the head of the fish resumes its ordinary shape.

On the first appearance of the male salmon in the Save in spring, he is entirely without the excrescence spoken of, or at all events has only the very germs of it; and throughout the summer its growth is slow, but it increases more rapidly towards the spawning season, at which period it has attained its full development.

No elongation whatever takes place on the jaws of the female salmon. They remain in the same state all the year round.

It is the commonly received notion that the hook on the lower jaw of the male salmon is for the purpose of enabling him to assist the female in forming a hole in the bed of the river, for the deposit of her roe. But such Mr. Keiller convinced himself is not the object for which it is designed. In his opinion, it is intended to prevent the males, which in the spawning season are most pugnacious, from killing each other; for when the jaws of even a twenty-five-pound fish are distended to the utmost, the hook is so much in the way that the opening in front of the mouth will admit little more than the breadth of a finger, and consequently he cannot grasp the body of an anta-

gonist. Indeed, were he enabled to do so, he would soon destroy him.



IN AND OUT OF SEASON.

This drawing represents the heads of three male salmon. No. 1, a fish when in high season; No. 2, when out of

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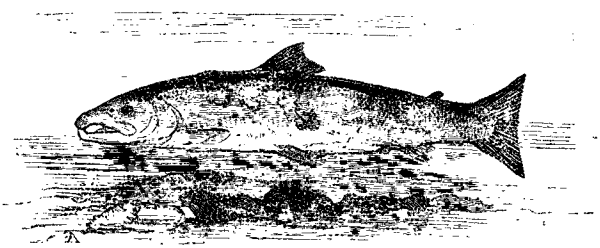
season, with the elongation of jaw, and the mouth closed; No. 3, also out of season, and with the elongation, but with the mouth opened to its full extent. No. 1 is an imaginary portrait, but supposed to answer in regard to size to what Nos. 2 and 3 would have been when in condition. Nos. 2 and 3 are actual portraits of the same fish, which weighed twenty-five pounds four ounces, and was caught on the 14th of September. The elongation on the jaws of Nos. 2 and 3 may be judged of from the nostrils, which as well in the minimum as the maximum state are accurately marked in the drawing.

In the breeding season the contests between the males are incessant and desperate. Mr. Keiller repeatedly noticed an immense salmon charge another with such thorough good-will, as to throw him fairly out of the water. As it is, their battles are bloody enough; not only are fish observed to be gashed in every direction — probably by their side teeth, for those in front, or on the tongue, cannot be brought properly into play, owing to the hook—but with large pieces of flesh and skin actually hanging down their sides. At the close of the season all the males are covered with scars. Unless one has seen the fish at this time, it is difficult to conceive his mutilated condition; and it appears certain, that were it not for the hook not more than a single male salmon would leave a spawning-ground alive.

But it is the males alone who, at the termination of the spawning season, are thus seamed with scars: another evidence, were such wanting, that the injuries have arisen from combats between themselves; for were the wounds inflicted by Otters, as many imagine, the

females would be equal sufferers with the males, which is not the case.

THE CHARGE.



AFTER THE BATTLE.

The first sketch represents a male salmon charging a rival; the second, a male, covered with honourable scars, after the wars are over.

To say nothing of the injuries salmon inflict on each other with their teeth, were it not for the cartilaginous elongation on the upper jaw, which forms a kind of pad in front of the brain, the concussion on the occasion of the desperate charges spoken of would be so great as to stun the assailant. When the fish makes his onset his jaws are usually closed, and the hook on the lower jaw is embedded in the upper, thus affording the latter support, and still further lessening, as applies to himself, the effects of the concussion.

"Nature," says my friend, in conclusion, "only works by fixed laws. To have given the male salmon a share of human intellect was not in accordance with her plans. She resorted to simpler means, and instilled envy and jealousy instead of reflection and reasoning power, which at all events would not have given the stimulus to exertion that the minor attribute confers. In order, however, to moderate the effects of these ferocious passions, this proboscis was bestowed, which thus prevents the male from inflicting mortal injury either on his rival or on himself."

So much for my philosophic friend, the results of whose experiments and observations are certainly very curious, and every naturalist will feel much indebted to him for paying such close attention to a subject so very interesting. Nevertheless, one cannot always coincide with his conclusions because he does not seem fully to make out his case.

He sets completely at nought the notion, with regard to the salmon, of intercourse between the sexes; and from the facts he adduces, I feel partly inclined to agree with him. But then he admits that the female occasionally leaves the spawning-ground, and makes little excursions about the river, at which time it seems quite possible she may have

proved unfaithful. He says, it is true, that from his observatory he could distinctly watch all her movements in the interval, and that she never came in contact with any male. But with the best of eyes, and though the position of the observer may have been ever so favourable, any one might be deceived at sixty or eighty paces distance, more particularly when looking at an object pretty deep perhaps in the water.

He suggests two causes for her taking these trips: first, that she may drop her ova here, there, and everywhere in the river as a provision against casualties; secondly, the requirement of rest from her labours. But these suggestions are unsupported by any kind of proof. In answer to the first, I say, why should not Nature have prevented her from taking up a bad position in the first instance? To the second, is it not quite as reasonable to suppose that her excursions are made in search of food, or that if she were exhausted with spawning, and required rest, she would lie still?

Neither does it appear to me that my friend's theory as to the male salmon stationing himself a little in the rear of the female, for the purpose of impregnating her eggs as they drift past him, quite holds good; for, by his own account, the male is himself often absent from his post in chase of rivals, during which time, so far as the ova from his particular female are concerned, his milt is altogether wasted. When, on the contrary, she in her turn is on the move, her ova have little chance of impregnation, at least from him.

But under any circumstances, and in spite of her lunges, a large portion of the ova must of necessity be deposited amongst the stones and gravel immediately behind the spawning-bed, and prior to reaching the male, so that,

according to my friend's theory, even if the marital male be at hand, that portion, at all events, will not be benefited by him.

Then again, he assumes that though the lunge of the female's tail when on the spawning-bed is partly to lift her ova from the bottom of the river, and to distribute them in the stream, it is principally to raise a cloud of dirt, thereby to blind the small fish lying in wait for them below. Is it not just as possible, on the contrary, that the violent motion of the tail may rather be to facilitate the exit of the roe from her own body—the throes of parturition, in short? And as to the cloud he speaks of, can it really be dense enough to conceal the eggs? If the bottom of the Save was muddy, I could conceive this to be possible; but where only sand and gravel exist, as is the case in that river, I should say decidedly not.

In another place, my friend assumes that the female never spawns on a rocky bed, because she could not there raise up the needful "cloud" to hide her ova whilst they were progressing down the stream. To my mind, the more probable reason for her avoiding rocks is that, in so exposed a situation, her eggs would not find the needful shelter from their enemies. Neither would they be secure from floods, which on ground divested of gravel and small stones would inevitably sweep them bodily away.

But in spite of my friend's philosophy, what pleases me most of all, is the very ingenious reason he assigns for the male salmon being provided in the spawning season with this elongation of the jaws—namely, that he may neither injure his adversary, nor hurt himself in his hostile charges. If such really be the case, Nature, it must be admitted,

has been more bountiful to the genus *Salmo*, than to most of her other creatures; for we know of few animals besides (and many in the breeding season are equally pugnacious with the salmon) that are especially equipped at that period with foils of any kind to curb their combative propensities, or who, when deprived of the free use of their teeth, have their head so defended, as to enable them to perform to perfection and with impunity to themselves, the part of a battering-ram.

Mr. Keiller affirms, it will be noticed, that the hook on the jaws of a twenty-five-pounds male salmon, in the breeding season, prevents him from grasping, in front at least, a substance of more than an inch in thickness. He may be right; but having repeatedly killed salmon in September and October, in Sweden, with baits of so large a size as to have required more than that space for their mere admittance into his mouth, I should imagine my friend has somewhat underrated the expansion of their jaws at that period.

In conclusion, "It is very difficult to divine," as the late Mr. Scrope truly says, when speaking of the subject in question, "what may be the use of this very ugly excrescence." But if Mr. Keiller should have hit the nail on the head—and there are high authorities who say he has done so—the knotty point which has for ages puzzled the naturalists, is finally set at rest.

Twelve or fourteen years ago, it may be proper to add, my friend made many discoveries regarding the artificial impregnation of roe, which I was then desirous of publishing. But as he from time to time put off furnishing me with the needful details and drawings, I have been forestalled by others, and it is now too late to submit them to the public. It is, however,

very satisfactory to find that the results of his experiments have been corroborated to the letter by Mr. Scrope, Mr. Shaw, Mr. Young, and other naturalists.

His theory also regarding the young fry, their slow growth, the period when they go to the sea, &c., mainly agrees with theirs. "They do not leave the eggs," he says, "until April. They remain in the Save during that summer and the following winter, at the expiration of which they are from two to three inches long. The second summer they also stop in the river, during which they double their size—that is, they attain to five or six inches in length. Whether they go to sea in the autumn, or not until the following spring, is not positively determined; but it is rather believed they depart before the setting in of the winter, for the reason, that in February and March great numbers of fish resembling salmon in miniature, and of a pound or so in weight, are caught in the brackish water at the confluence of the Gotha with the sea, which are supposed to be the fry that left us about three months before. The third autumn they revisit the rapids of the Save, in the shape of grilse, of several pounds in weight."

Mr. Keiller's conclusions as to the slow growth of the fry are drawn from the following facts. In July—that is, some two months after the eggs are hatched—there are always two distinct families of the salmon fry in the Save: the one about two inches in length, but too small to take either the natural or artificial fly; the other family averaging from four to five inches in length, which take both baits with avidity. There is no intermediate family. The two-inch family can therefore be no other than those recently hatched; the five-inch family the breed of the preceding season.

"In corroboration," says my authority, "I once had occasion to dam up a small portion of a branch of the Save, at Jonserud, the upper end so effectually as altogether to debar communication with the river above; that is as regarded fish, for the water found access to the pond amongst the stones of which the dam was composed. At the other end indeed there was so very small an outlet that it was hardly possible, much less probable, for even fry to ascend or descend. These dams were constructed after the salmon had spawned in the autumn, and the space enclosed being full of their roe, the pool, during the succeeding summer, swarmed with fry. Beyond, however, observing that they were of a very diminutive size, and too small to take fly or bait of any kind—in short, that they were of the first family—I paid but little attention to them. But the second summer the pool was full of fish of five or six inches in length, and of that size only; and as they were very eatable fellows, I captured numbers of them. They in every respect resembled the second family common to the Save, but they were a trifle fuller and larger, which I attributed to more sunshine and less snow-water—in short, to a greater degree of warmth. The second winter was unfortunately a severe one, and they all died."

CHAPTER VII.

SALMON TROUT—GREY TROUT—WENERNS-LAX—SILFVER-LAX—COMMON TROUT — SALMO "OCLA — SALMO PALLIDUS — SALMO VENTRICOSUS — SALMO CARBONARIUS—SALMO RUTILUS—THE CHARR—THE SMELT—SIR THOMAS MARYON WILSON.

To proceed with the enumeration of the fishes in my vicinity.

The Salmon Trout (*Öring*, Sw.; *Salmo Trutta*, Linn.) was common with us in the autumn; but as with the *S. Salar*, was probably only found below the Falls of Trollhättan. This fish in the season is also common in most of the Scandinavian rivers, whether flowing into the Baltic or the North Sea. According to Nilsson, it is an inhabitant of the lakes of the interior; of such, it is to be presumed he means, as have no accessible communication with the ocean. Kröyer informs us it is common in the fjords and rivers of Jutland, though less so than others of the *Salmo* tribe.

Swedish naturalists give us no information as to the period at which the salmon trout spawns; Kröyer imagines in June

and July; but in this matter I consider he is mistaken, not being aware of any species of the genus *Salmo* spawning until towards the end of the year—none certainly in my neighbourhood, or on the western coast of Sweden. Bloch, who I doubt not is right, assigns October and November as the months in which this fish has its lek.

The salmon trout attains to a considerable size in the northern waters; Kröyer says to twenty pounds. Faber gives twenty-eight inches as its maximum length.

The flesh of this fish, which is red, is in high repute for the table, next perhaps to that of the salmon. Many, indeed, give it the preference, as being more easy of digestion.

The Grey Trout; Sea Trout; Bull Trout (*Öring*, Sw.; *S. Eriox*, Linn.), was common with us in the autumn; but unless identical with the great trout of the Wenern, it was only found, as with the salmon and salmon trout, below the Falls of Trollhättan. Owing to the confusion arising from local names, it is difficult to define the geographical limits of this fish; but it seems common during the season, as well in the rivers that flow into the Cattegat, as into the Baltic, and in those streams that empty themselves into the North Sea.

The salmon trout, as also the salmon, when making their way up a fjord or river, are said to hold to the middle of the stream, and to the deepest water; but the grey trout, on the contrary, is believed to take advantage of slacker water. It is also recorded of this species that they proceed into much shallower water than the salmon trout or the salmon; to such shoals, in fact, as render it difficult for the fishermen, in their flat-bottomed punts, to get up to

them. Hence the established fisheries that are most successful with salmon, are not equally fortunate with the grey trout, and *vice versâ*.

The grey trout is very tenacious of life, and exists for some time after being taken out of its native element. During the winter, we are told, it may be kept for months in a *Sump*, or fish-box; and the fish-dealers believe it can live equally well in fresh as in salt water. It is, moreover, said of this trout, that when put into spirits of wine, it lives longer than most other fish.

There is an old saying amongst the Danish fishermen, that when the grey trout first enters the fjord from the sea, it is sluggish, and its powers of vision dull. Certain it is, that, as with us in England, it remains for some days in brackish water, before continuing its journey up the river.

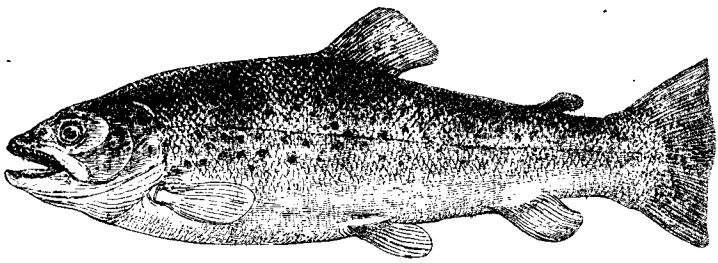
The grey trout is reported to be very voracious. Kröyer says he has sometimes found shrimps, more than one species of *Goby*, and other small fish in its stomach; as also that in want of other sustenance the males at times feed on the roe of the female.

The flesh of this fish is held to be very inferior to that of either the salmon or the salmon trout. When fattest, it is of a pale pink colour; but as the fish falls off in condition, it becomes yellowish-white. Although much less palatable than the salmon, it is nevertheless, as Kröyer tells us, equally dear or dearer in Copenhagen; but that is because this fish can be obtained alive, whereas the salmon is only to be had dead.

The grey trout with us spawned towards the end of October, or beginning of November. Swedish naturalists

are silent on the subject, but Kröyer assigns November, December, and January as the period of the lek.

This fish attains to a large size in the northern waters. Faith affirms that in Jutland it has been captured of thirty pounds weight.



THE WENERNS-LAX.

This drawing was taken from a male fish in high condition, weighing upwards of thirty pounds, and measuring forty-two inches in length. The tail, it will be remarked, is nearly square, a characteristic, however, less observable in the younger fish than in those of mature age.

The male and female adults always differ somewhat in appearance, and in the spawning season considerably. At that time, indeed, the male, as with the male *S. Salar*, becomes so changed in form and colour, as to be hardly recognizable. The cartilaginous substance on his snout, in like manner with the *S. Salar*, then becomes greatly developed, and though the "ugly excrescence" only continues for a time, yet it has conferred on the male Wenerns-Lax (as also, I believe, on the male *S. Salar*) the appellation of *Krok*, or Hook, by which name (and by that alone, *Lax*

being dropped altogether) he was known with us *all the year round.**

Very considerable resemblance existing between this huge trout—for though called *Lax*, or salmon, he is no other, as we have said, than a trout—and the *S. Eriox*, or grey trout of authors, it becomes a subject for the consideration of Ichthyologists, whether it may not be identical with the migratory species last named, though slightly altered by long permanent residence in the fresh water to which it is thus restricted. The probability of the two being identical, is increased by the fact that the smelt, which, in England, is considered of marine origin, is, as will presently be shown, very numerous in the Wenern and other Scandinavian lakes, to which access cannot be obtained from the sea. In all its characters the Wenerns-Lax answers to the *S. lacustris* of authors (*S. ferox*, Jardine); but if the question as to its identity with the *S. Eriox* be decided in the affirmative, the *S. lacustris* has probably no existence as a species; and rather than class the Wenerns-Lax by that name, I prefer retaining it under that by which it is known with us.

The Wenerns-Lax was very common in my vicinity, as also, I imagine, in most of the great waters throughout Scandinavia. From what Læstadius says, I infer it to be an inhabitant of the Lapland lakes; for when speaking of trout, he tells us they attain to twenty pounds weight and upwards, and that one species is called the *Grå-*

* May not this circumstance have partly given rise to the notion entertained by some Ichthyologists on the continent of Europe, that the salmon with the hook is considered by them as a distinct species, and called *Le Bécard* and *S. hamatus?*

Lax, or grey trout, grey being the predominant colour of ours.

Many of these fish remained in the Gotha all the year round, but by far the greater portion, when the spring was pretty well advanced, left us for the Wenern, where they passed the summer; and it was not until the fall of the year that they again revisited our rapids, for the purpose of spawning.

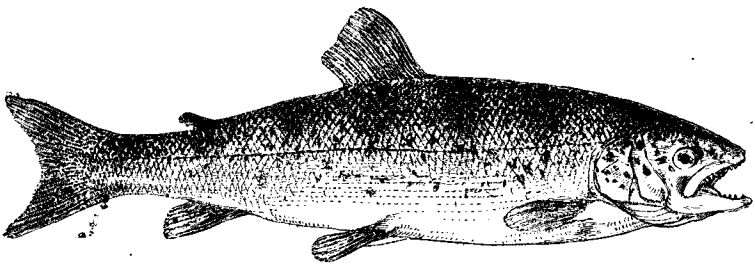
The Wenerns-Lax is held in estimation as food; but the flesh, even when in high condition, is much less firm than that of the *S. Salar*, and it also differs materially in colour, being rather of an orange-yellow, than red.

The spawning season with this fish was the end of October or November; but long prior to this period—generally in the month of August—they fell down from the lake into the upper part of the river. The first batch consisted for the most part of males; and it was not until some little time afterwards that any considerable number of the females joined company. When the lek was over, the fish either headed back into the Wenern, or retired to the deep pools in the Gotha, where they remained during the winter, to recruit their strength.

The young of the Wenerns-Lax, as indeed those of every species of the genus *Salmo*, went with us by the general name of *Öring*.

This fish attains to a great size, especially the males, which on the average are nearly a third larger than the females. I have not unfrequently captured males of thirty pounds weight and upwards, whereas the females seldom exceeded twenty pounds. I cannot remember our taking

more than one female exceeding twenty-four pounds, and she was considered a monster in her way.



THE SILFVER-LAX.

This drawing was taken from an individual in high condition, weighing twelve pounds.

The Silfver-Lax (*Silver-Salmon*), also presumed to be a trout, is distinguished from the Wenerns-Lax by several marked features. The greater portion of its body is of a much more silvery white, and hence its Swedish name. It is a more elegant and salmon-shaped fish, has a more forked tail, and is much smaller just before the caudal fin; the gape is smaller, the posterior end of the upper maxillary bones is in a vertical line immediately under the pupil of the eye, and the body is marked with cruciform black spots.

I am not sure that this fish has been described by naturalists, but if so it must have been done somewhat inaccurately.

May not the Silfver-Lax, which differs as much as night from day from any other fresh-water trout I have seen, be identical with the *S. Trutta* of Linnæus, which it much

resembles, though somewhat altered by long permanent residence in fresh water, to which it is confined?

Until, therefore, Ichthyologists determine to what species this fish really does belong, I think it best to retain the name by which it was known in the Gotha and the Wenern.

The Silfver-Lax was not uncommon with us at certain seasons of the year, in the Gotha at least. Owing to this species not being very well identified, it is impossible to define its geographical limits. From Læstadius speaking of a *blank*—, or shining-lax, however, I am inclined to believe it to be an inhabitant of Lapland, and if so, it is probably pretty generally distributed throughout Scandinavia.

The Silfver-Lax is a splendid fish in appearance, and excellent for the table; and though of a lighter colour, it is held in nearly equal estimation with the salmon.

It is to be presumed that this fish spawned about the same period as others of the genus *Salmo*; but though an old servant of mine asserted that he had on two or three occasions in the spring of the year—almost the only season, indeed, of our capturing it—found incipient roe of the size of a pin's head in the female, I myself never saw this fish either preparatory to, or during the spawning season. What became of it at that time was always a mystery to us; but the presumption is, it either held its lek in the deeps, or (which is less probable) that it crossed the Wenern, and ascended some of its tributaries.

It was always in the highest possible condition, even in the early part of the spring, at which time the adult Wenerns-Lax having only partially recovered from the effects of spawning, are often not only somewhat meagre, but infested with parasitical animalcules.

The usual weight of the Silfver-Lax was from seven to nine pounds. I have, however, killed this fish of fourteen pounds weight, which is the largest I have ever heard of, but not of less than from three to four pounds weight.

We never took many of these fish: four or five was my best day's sport. When hooked, it shows much play, and plays, moreover, so differently from other species of *Salmo*—jagging the line, as it were—that without actually seeing it, I knew almost to a certainty what fish was on the hook.

The Common Trout (*Öring*, Sw.; *S. Fario*, Linn.) was found in my vicinity; as also, by all accounts, in almost every lake and river from Scania to Lapland. But as Ekström does not enumerate it amongst the fishes of the eastern Skärgård, it is not, I apprehend, even a casual visitor to salt or rather brackish water.

According to Nilsson, there are two species of the common trout in Scandinavia—namely:

1. The *S. Fario*, Linn.; (*Bäckrö; Stenbit; Stenöring*, Sw.; so called from its chiefly inhabiting stony brooks), which the Professor describes as from six to eight inches in length, and as never being found in the alpine regions.

2. And the *S. punctatus*, Cuv. (*Fjällöret; Fjällöring*, Norw.), which he states to be twelve inches in length, and as being confined chiefly to the rivers and lakes of the Fjälls.

The common trout attains to a considerable size in the peninsula; for, if I mistake not the fish, I myself have killed it of eleven pounds weight—not, it is true, in the vicinity of Ronnum, but in a tributary of the Clara in Wermeland.

In addition to the several species of the genus *Salmo* enumerated, Nilsson includes the *S. Ocla*, Nilss., and the *S. Truttula*, Nilss., in the Scandinavian Fauna. But unless one or other of these fish be identical with the *S. Erioœ* of Linnæus, I am not aware of their having come under my observation.

The *S. Ocla*, the Professor tells us, is found in the river Dal, and perhaps in other rivers. It arrives from the Baltic about the summer solstice—that is, somewhat later than the *S. Salar*, and spawns at the same time as that fish. Its flesh is white; length, hardly two feet, and it seldom exceeds four to five pounds in weight.

The *S. Truttula*, Nilss., according to the Professor, ascends from the sea to rivers and lakes. Length, from twelve to sixteen inches; the flesh pale, scarcely reddish; has examined specimens from Gothenburg and the lake Wettern.

The Charr (*Röding*, Sw.), though not found in the Wenern or the Gotha, inhabits several of the waters of the peninsula.

Although some of the best European authorities admit, I believe, of only one species of Charr, Nilsson includes no less than six species in his Prodromus.

1. The *Salmo alpinus*, Linn.,* which, as the name would denote, is confined, I believe, to the more alpine regions of the peninsula. Læstadius, when speaking of this fish, says:

"The under part of the belly is red; the back, dark green; the sides, which are sprinkled with small round spots, intermediate between red and green. It is the handsomest fish in our waters. It would seem properly to belong to the fjäll lakes, of which, with the exception of a single species of trout, called in Lappish *Tabmok*, it is the only inha-

* "Bloch," pl. 104.

bitant; and even if found in certain lakes in the wooded district below, it is beyond doubt only in such as are supplied with water from the fjäll lakes. It even dwells in lakes situated at so great an altitude as, at all seasons, to be sheeted with ice. It leks in September on stony ground, and is then taken in large numbers, as well in the flew as the drag-net. During the spawning season it changes colour greatly, the usual light red under the belly then becoming dark red. Though a small fish, weighing only from one to two pounds, the ova forming the hard roe, nevertheless, are as large as those of the trout, which attains to a very considerable size. Its flesh is red and delicious."

"Though not usually varying much in size," Læstadius goes on to say, "there are giants amongst this species. Fjellström, some years ago, captured on a *Lång-ref* one that weighed fifteen pounds."

2. The *S. Salvelinus*, Linn.,* is only found, according to Nilsson, in the lakes Wettern, Sommen, and a few other lakes in the province of Småland. The flesh is brown-red, fat and palatable. It spawns in October, in about six feet of water, and attains to twelve or fifteen pounds in weight.

3. The *S. pallidus*, Nilss. So far as is ascertained, found only in the Lake Wettern. The sides marked with brownish-red spots; the flesh white, lean, and considered of little value. According to the fishermen, this fish spawns in the month of October, in from thirty to forty fathoms of water, and never attains to more than eight to nine pounds in weight.

4. The *S. ventricosus*, Nilss. (*Gautesfisk*, Norw.) As far as is known, only found in the lake Sigdal in Norway, where it is said to live in very deep water. Distinguished

* "Bloch," pl. 99.

from all other species of *Salmo* by inflated belly, short, white, obtuse snout and small eyes. Length, twelve inches and upwards. Is captured in the winter time on hooks.

5. The *S. carbonarius*, Nilss. (*Kullmund*, Norw.) is found in several of the lakes in the wooded regions of western Norway; lives like the *S. ventricosus*, in the depths, and never voluntarily ascends to the surface, not even in the spawning season. In colour this fish very much resembles the *S. ventricosus*, but differs in the shape of the body, which is not inflated, &c. The flesh is white, soft, and little valued. Is captured during the summer on hooks baited with living frogs.

6. The *S. rutilus*, Nilss., is found also in western Norway, but distinct from the species named. Length, twelve inches.

But the charr, whether a single species or several, is, I apprehend, more generally distributed throughout Scandinavia than Swedish naturalists seem to imagine. In the lake Ullen, in Wermeland, near to which I at one time resided, it was abundant; and this being the case, it is probably found in many other districts. As with us in England, however, the charr is doubtlessly a very local fish. Læstadius tells us, indeed, "that although plentiful in Horn-Afvan" (an extensive lake in Piteå Lapmark), "and this even at its eastern extremity, it is not found, nevertheless, in Kakel" (either forming a part of the same lake, or immediately contiguous to it), "and never descends the stream to Udjaur."

The Smelt (*Slom; Nors*, Sw.; *Osmerus Eperlanus*, Flem.) was very plentiful in my vicinity, as well in the Gotha as the Wenern. It is said not to be found in Scania; but in most of the larger lakes and rivers of the more midland

parts of Scandinavia it is very common. Its limits to the northward seem not very well ascertained, but I myself have seen it in abundance in the lake Råda, in Wermeland, situated in the 60° of latitude. This fish, according to Ekström, is found in the eastern Skärgård, and I almost imagine in parts of the western also; for although not included in the reverend gentleman's catalogue of the fishes of the Cattegat (1850), yet, from its being frequently captured by the Gothenburg fishermen, the inference is, that it came from brackish, if not from salt water. Kröyer speaks of it as common in the interior of Jutland; also in the fjords and on the coast.

Swedish naturalists are of opinion there is only one species of smelt in Scandinavia—namely, the *C. Eperlanus* of Flem. They consider it identical with the *C. Eperlanus marinus* of Bloch,* and that the only difference between the two is in regard to size. There were persons in my vicinity, however, who averred that there are two distinct species at the least in the Wenern, and draw their conclusions not only from those fish spawning at different times, but from the great disparity in the size of the fish taking part in the several leks.

Be this as it may, the larger kinds, commonly from six to eight inches in length, which keep in separate shoals by themselves, go by the name of *Slom;* and the smaller, from two to four inches in length, which also keep in separate shoals, by that of *Nors:*† At times, however, it happens that a scattered *Slom* is found amongst the latter, in which

* Pl. 28, fig. 1.

† In consequence of its transparency, and of its bluish-white colour, this fish was with us called the *Blå*—or blue Nors; as also the *Bla-nal*, or blue-needle, on account, no doubt, of its very slender form.

case he, in some parts of Sweden, is called *Nors-Kung*, or Nors-King.

The smelt is said to be of a dull disposition, and slow in its movements; and to prefer large lakes with sandy bottoms. For the greater part of the year this fish confines itself to the deeps, and it is only during the spawning season, which occurs in the spring, that it approaches the strand. It is seldom found singly, but almost wholly in large shoals.

The Scandinavian smelt has the same cucumber-like smell as ours; the larger kind, or *Slom*, in a less degree than the smaller, or *Nors*. We in England have no dislike to this peculiar odour, but the Northmen in general speak of it as the reverse of fragrant. Some, indeed, imagine the fish is thereby rendered unwholesome as food; and in places, the fishermen go so far as to assert, that it drives away other fish from the fishing-grounds. Faith tells us, moreover, that in still water, the odour is so penetrating, that whatever is dipped in the water where this fish resorts in great numbers, becomes impregnated.

The smelt is very voracious, feeding chiefly on insects, worms, and the roe of other fish; also, it is believed, on smaller fishes.

In Sweden the smelt is not held in general estimation for the table. Some, indeed, pronounce it insipid, and allege that it has a disagreeable flavour. But its ill repute is probably owing to the antipathy people in general entertain to its odour. In the localities where it is captured in large quantities, it is dried in the sun, or salted down, and in this state forms an important article of food for the poorer classes.

But though people may not agree as to the eatable

qualities of the smelt, there is no difference of opinion as to the young of that fish, the so-called *Nors*, being the best of baits to beguile other fish ; and as a consequence, it is much sought by fishermen.

In my vicinity the smelt spawned very early in the spring, occasionally before the ice broke up. The lek was held in pretty deep water, at times near to the mouth of streams tributary to the Wenern, at others in the bays and inlets of the lake itself. According to Ekström, " the lek is confined almost entirely to the night-time. At dawn of day the fish retire, and do not return to the spawning-ground until the approach of evening." " Other fishes," he goes on to say, " prefer fine weather for the lek, but the smelt the very contrary. Hence a snow-storm, accompanied by wind, occurring during the spawning season, is called a *Nors-il*—that is, a smelt-gust or blast. The lek lasts from eight to fourteen days. Should it begin very early in the spring, it continues longer than if at a later period, and *vice versâ*. The female is very prolific, and the fry are said to grow rapidly."

The smelt attains to a considerable size in the Wenern. Those that came under my own observation were not larger than are usually seen in England; but a friend resident near the northern shores of that lake, assures me that it is there occasionally captured of nearly a pound in weight. The average of the larger kind in his vicinity, when congregated at the lek, he describes as half-a-pound each.

The smelt is taken in large quantities in certain parts of Sweden ; mostly during the spawning season, and with the drag-net, which with us in the Wenern was not unfrequently brought into play, even before the ice broke up.

In some places the net in question is only used during the night-time; and from the fisherman being aware that the smelt, like the *Salmo* tribe is generally attracted by any bright object, he makes large fires on the adjacent shores, the better to lure the fish from the deeps to within the sweep of the net.

During the summer time, when the smelt holds to pretty deep water, it is in some places captured by means of a net called *Sänk-nät*, or sink-net. This is circular in form, and suspended from an iron ring of some six feet in diameter, kept horizontal by a four-slip bridle. To the upper part of this bridle is attached a stout line, or if the water be not too deep, a pole of eighteen to twenty feet in length, whereby to raise or depress the net. But this device, also frequently adopted in Scandinavia for the capture of other fish, is not very productive, and is seldom resorted to, except for the purpose of procuring bait.

In England the smelt visits our rivers only during its spawning season; and until naturalists here had seen the specimens that I brought from the Wenern, which they pronounce to be identical in every respect with our own, they seemed little inclined to believe it equally an inhabitant of fresh as of salt water. But this fact being now proved, it would be easy to introduce the smelt into our ponds and lakes; and an admirable substitute it would prove for the dace, roach, &c., with which at present they are for the most part filled.

Sir Thomas Maryon Wilson, and according to Yarrell, Colonel Meynell, in Yorkshire, have indeed not only made the attempt, but up to the present time the experiment has perfectly succeeded. In reply to inquiries on the

subject, the Baronet under date of February 21, 1853, writes me as follows:

"The short history of the smelt is this. In March, 1847, I sent a boat round to Rochester, and there I bought two hundred full-grown smelts, of which upwards of seventy died on their voyage round to Charlton. I sent one hundred by the Brighton Railroad to Hayward's Heath, and thence by a cart to Searles. Six were put into the pond at Searles, and the remaining ninety-four reached Pilt-Down Pond safely. The pond at Searles is now full of large smelts, numbers have been taken out of it, and I eat of them when down there only last month, at which time they were full of roe. And what are supposed to be smelts, have been seen by my gamekeeper in Pilt-Down Pond in shoals; but I have not yet drawn a net through that pond—which, as you know, is large and deep—fine enough to take anything so small as a smelt."

CHAPTER VIII.

THE GRAYLING — COREGONUS OXYRHINCHUS — LÖF-SIK — HELGE-SIK — COREGONUS CLUPEOIDES — COREGONUS FERA — COREGONUS ALBULA — SALMO WIMBA — HABITS OF THE COREGONI — THE BURBOT — EEL — RIVER LAMPREY — SEA LAMPREY — PLANERS LAMPREY — SANDPRIDE — CRAY-FISH — NATURALISATION OF FISH — LATE EARL OF DERBY.

THE Grayling (*Harr*, Sw.; *Thymallus vulgaris*, Cuv.) was neither an inhabitant of the Gotha nor the Wenern; but it abounded in the Clara, and other northern tributaries of that lake. Never having met with or heard of this fish in the midland or southern parts of Sweden, I am much inclined to believe it is confined to the more northern portion of Scandinavia—say from the 59° or 60° of north latitude, upwards. As, however, not only English but Danish naturalists describe it as a very local fish (Kröyer tells us it is only found in a few lakes in Jutland), it is possible I may be mistaken in the matter. What its limits to the northward may be, I know not; but as I myself have captured it in abundance high up in Lapland—say in about the 69° latitude—I apprehend it is to be found nearly as far as the North Cape itself.

The grayling would seem to be a very hardy fish. Læstadius tells us, that next to the pike, it makes the nearest approaches to the Lapland Fjäll lakes, only inhabited, according to him, by the Charr and a single species of trout, called in Lappish the *Tabmok*.

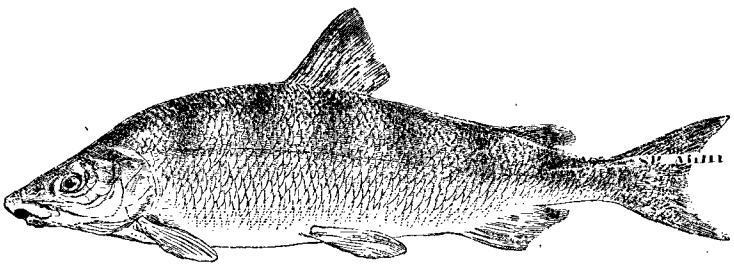
Bloch tells us, that one very curious circumstance respecting this fish, is the remarkable odour emitted from its body. Ælien has compared it with the scent of thyme, and Ambroise with that of honey. Pennant denies the existence of this odour. The statement, however, does not appear to be without foundation, for the fish devours insects which possess a strong odour, and which may communicate it; as for instance, the *Gyrinus natator*, Linn., which, according to Ræsel, has so strong an odour, that when several of these insects are collected together, one may scent them at a distance of five to six hundred paces. For as these insects are not always to be found, or at least not in so great numbers, one may consider the smell of the grayling as a varying quality that sometimes exists, and at other times disappears.

As with us, the grayling is held in high estimation for the table. It is said to be preferable in October and November. The flesh is white, and is looked upon as so easy of digestion, that it is prescribed for the sick.

In Scandinavia the grayling spawns in May, or the beginning of June, the time varying somewhat according to latitude and locality. "The lek is carried on," Læstadius tells us, "in the current, and in preference in shallow water; and though the fish are then congregated in large shoals, male and female would seem to keep together in pairs. During the spawning season the fish varies considerably in appearance, its usual white colour under the belly becoming red."

The grayling attains to a considerable size in Scandinavia. I myself have never killed it exceeding three pounds in weight, though on one occasion I hooked, and all but landed, a very much larger fish. Mr. Richard Dann, however, assures me he has repeatedly taken grayling in the northern rivers of fully five pounds in weight. Kröyer also speaks of grayling of four pounds and upwards.

Of the *Coregoni* we had several species in my vicinity. But English naturalists assure me that, singularly enough, not one of the specimens brought over by me is identical with those found in this country.



COREGONUS OXYRHINCHUS.

Salmo oxyrhinchus . . "Linn."
... *Thymallus latus*, "Bloch," pl. 26.
Coregonus oxyrhinchus, "Nilss. Prod.," p. 14.
... ... "Ekström," p. 198.
... ... "Kröyer," vol. III. p. 76.

Bloch is quoted, it will be observed, amongst the synonyms; for though the portrait of his *Thymallus latus* is

not particularly well executed, there cannot, to my mind, be much doubt as to its identity with the true *Coregonus oxyrhinchus*.

The accompanying drawing was taken from a fine specimen captured last autumn in the Wenern, of from three to four pounds in weight.

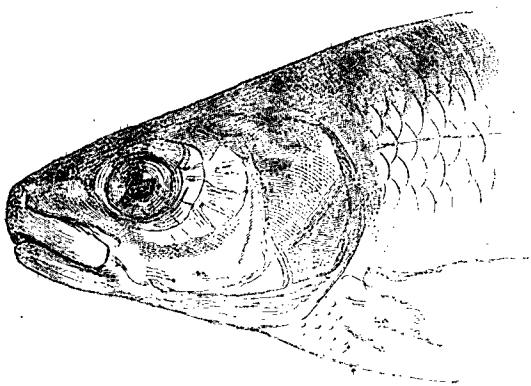
The distinguishing characteristics of this species are the remarkable elongation of the upper jaw, the peculiar form of the mouth, the small eye, and the high shoulder.

The *C. oxyrhinchus*, Linn., called in Sweden, from its long snout, somewhat resembling the beak of a bird, the *Näbb*—or *Beaked-Sik*, was very common with us, and throughout the midland and more northern portions of Scandinavia. According to Zetterstedt and von Wright, indeed, it is found high up in Lapland. But it is not confined to the lakes and rivers of the interior alone, for it inhabits equally the North Sea and the Baltic, and thrives [illegible] well *in* salt water as in *fresh*.

In the Wenern, this fish spawns about the end of October or the beginning of November, the time being somewhat regulated by the state of the weather.

Nilsson tells us the *C. oxyrhinchus* attains to a length of from twelve to eighteen inches; Kröyer eighteen to twenty inches, and to a weight of two pounds; whilst Bloch makes its weight four pounds and a half. But in the Wenern, this fish is taken of a still more considerable size, individuals of seven or eight pounds being not at all uncommon. The Kållandsö fishermen, who are high authorities in such matters —for in the course of their vocation they roam over a considerable portion of the Wenern—assure me, indeed, that they have captured individuals weighing eleven pounds.

Læstadius, when speaking of the *Sik* (and from his description of the fish there is reason to believe he means the *C. oxyrhinchus*), tells us, moreover, that in certain of the waters in his vicinity, it has been met with of from eight to twelve pounds in weight; and that in one instance, a perfect monster, weighing nineteen pounds, was made prize of! "This fish was captured," such are the reverend gentleman's words, "in the deepest hole of the lake Vanka. It was deformed in shape, the head not much larger than that of a five-pound fish, the back crooked, and the belly protruding, so that the fish was quite oval in form."



THE LÖF-SIK.

This drawing was also taken from a fine specimen, weighing nearly three pounds; and as it in the main agrees with the *Salmo Maræna*, of Bloch, plate 27, the two are pro-

bably identical; but until Ichthyologists have decided the point, I think it better to retain the name by which it was known with us.

Kröyer, in his "Fishes of Denmark," it may be proper here to remark, assumes the *Salmo Maræna* of Bloch and the *S. Lavaretus* of Linnæus, to be identical, and classes both under the head of *Coregonus Lavaretus*. But this is not all, for he places (as it would appear) a copy of Bloch's figure of the *S. Maræna*, at the head of the chapter, afterwards including both names in his synonyms at page 57. When therefore he speaks of the *C. Lavaretus*, there is reason to believe that some of the habits of the *S. Maræna*, Bloch, may be included.

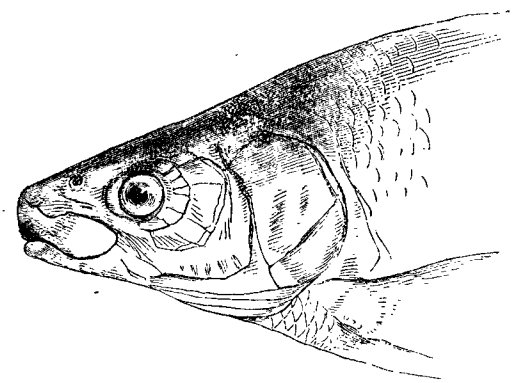
The leading characteristics of the *Löf*—, or Leaf-Sik, are that the length of the head as compared with the length of the whole fish, from the nose to the end of the fleshy portion of the tail, is as one to four and a half; that the length of the head is equal to the depth of the side of the body between the dorsal and ventral fins; that the orbit of the eye is so large, as to equal one-fourth of the whole length of the head; that the lateral portion of the intermaxillary bone is long, being equal to twice the breadth of the nose in front; and that the snout is deep.

The Löf-Sik was abundant in my vicinity, as well in the Gotha as the Wenern.

This fish spawned about the middle of October, that is some ten days or a fortnight earlier than the *C. oxyrhinchus*.

It attained to a large size in the Wenern, individuals of six or seven pounds being frequently met with. The Kållandsö fishermen assured me, indeed, that as with the

näbb-sik, they have taken specimens of upwards of ten pounds in weight.



THE HELGE—AND THE MÅRTENSMESS-SIK.*

The above representation was from a fish of nearly equal size to that from which the preceding drawing was taken; and as it corresponds in great measure with Bloch's *Salmo Wartmanni*,† as referred to by Nilsson—the same in all probability as the *Salmo Lavaretus* of Linnæus—it seems pretty clear that it is the true *C. Lavaretus* of authors. As nevertheless there may be doubts on this point, I prefer, as with the löf-sik, to call it by the name it was known by in my vicinity.

* The fishermen in my neighbourhood assert that the Helge-Sik and the Mårtensmess-Sik are distinct species, and having considerable faith in their accuracy, I am not at all prepared to gainsay their statement. But as Mr. Yarrell, to whom I submitted several specimens—as it was believed of each kind—could not discover any characteristic difference between them, I have thought it best, though with some misgivings, to consider them as identical.

† Plate 105.

The marked features of this fish are as follows. The length of the head as compared with the whole length of the fish, from the nose to the end of the fleshy portion of the tail, is one to six; the length of the head considerably less than the depth of the side of the body; the intermaxillary bones short, the posterior edge not reaching in a vertical line to the anterior edge of the orbit of the eye; the eye small; the snout less deep than that of the supposed *Salmo Maræna* in specimens of equal length.

The Helge-sik—which for brevity's sake I shall in future call it—like the löf-sik, was very common with us. With both species this is, I believe, the case throughout all the more midland and northern parts of Scandinavia. But from the contradictory accounts given of the sik tribe, it is difficult to define their geographical limits. Both the helge- and the löf-sik, as respects the peninsula, would seem to be pretty much confined to fresh water. This is to be inferred at least from Ekström neither including them amongst the fishes of the eastern Skärgård, nor amongst those inhabiting the waters of the western coast. Kröyer, indeed, tells us that *his C. Lavaretus* (identical no doubt with the löf-, or the helge-sik), cannot exist in salt water. But Faith, on the contrary, will have it that this fish is found in abundance in Randersfjord. When great authorities differ, it is difficult to determine who is in the right; but to my notion the scale turns in favour of Faith, who, as a practical man, ought surely to know of what he is speaking.

With us the helge-sik spawned a fortnight or so later than the löf-sik, that is, about the middle of November; and again (supposing the fishermen in error as to the existence

of the second species) in the end of that month or the beginning of December.

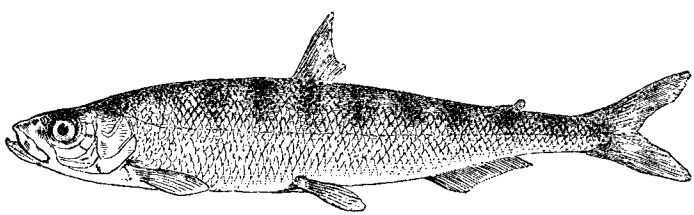
This fish has not attributed to it as large a size as either the näbb-sik, or the löf-sik; but fishermen have nevertheless told me they have taken specimens weighing several pounds.

Independently of the three larger species of sik mentioned, Nilsson speaks of two others as belonging to the Scandinavian Fauna, namely:

The one which he imagines to be identical with the *Coregonus Clupeoides*, of Pallas, is, he tells us, an inhabitant of the lake Wettern, and attains to twelve inches in length.

The other, answering, according to his conception, to the *Coregonus Fera* of naturalists, he describes as confined to the Ringsjön in Scania, and as ten inches in length.

Of the smaller species of *Coregoni* we had:



COREGONUS ALBULA.

Salmo Albula . .	Linn.,	"Retzius, Faun. Suec.," p. 349.
Coregonus Albula	...	"Nilss. Prod.," p. 17.
... ...	...	"Ekström, Mörkö," p. 203.
... ...	...	"Kröyer," vol. III. p. 93.

The above drawing was taken from a full-grown fish, captured during the past autumn in the Wenern.

This species is immediately distinguished from the larger

Coregoni mentioned, by its having the lower jaw longer than the upper, and from never exceeding seven to eight inches in length.

The *Coregonus Albula*, Linn., called with us the *Siklöja*, or Sik-bleak, from its partial resemblance to the true bleak, as also the *Sil*, was common both in the Gotha and the Wenern, and I believe in most of the lakes and rivers throughout Scandinavia. It is an inhabitant, likewise, of the eastern Skärgård, but not I believe of the western.

The *Coregonus Albula*, in appearance, greatly resembles the Vendace, described by Sir William Jardine as an inhabitant of Lochmaben in Scotland, and its habits are similar. It keeps in large shoals; it never attains to any considerable size; would never, as far as our experience went, take a bait; and it was only once now and then when near to the surface, that we could lure it with a small artificial fly. It is, in fact, but rarely captured, excepting in nets; and is so delicate as to die almost as soon as out of the water; even if transferred at once to the *Sump*, or fish-box, which with me was capacious, and placed in the stream itself, it lived but a very short time.

With us, this fish spawned towards the end of October or in the beginning of November. The young were called *Sil-Guppor*, in contradistinction to *Sik-Guppor*, the young of the *Sik*.

Swedish naturalists speak of a second species of the smaller *Coregoni*, which from being found in the lake Ånimmen in Dalsland, they designate as the *Ånims-Wimma*—the *Salmo Wimba* of Linnæus, which is described as differing from the *C. Albula* in having the adipose fin slightly serrated.

But as the lake in question is almost immediately contiguous to, and connected with the Wenern, it seems probable that—if distinct from the *C. Albula*—it is likewise an inhabitant of that lake.

The fishermen in my vicinity, indeed, made mention of a second species of the smaller *Sik*, which, from being remarkably high-shouldered, they called the *Krok-back*, or crooked-back. It spawned, according to their account, about ten days after the *C. Albula*, from which it was readily distinguished by its back being greener, and from the jaws being nearly equal in length.

It is very possible, therefore, that if the *Salmo Wimba* of Linn. exists as a species, it may be identical with the fishermen's crooked-back, of which unfortunately it was out of my power to procure specimens before leaving Sweden.

The habits of the several species of *Sik* mentioned, of the larger kinds at least, would appear to be much alike. They keep for the most part to the deep, and only approach the shore in spring and autumn: at the former season, when following the smelt, or other fish to the spawning-ground for the purpose of feeding on their roe; at the latter, when about to spawn themselves. The sik is a very active fish. Faith says: "When the net has neared the strand, and it finds itself within the toils, it often leaps far on to the dry land." It is not tenacious of life, dying soon after being taken out of the water. The least blow on the head kills it. It is reputed to be a very cunning fish, so much so, as to be wary and difficult of capture, except in the spawning season. Hence the saying applied in parts of Sweden to sly people; "listig som en sik;" that is, cunning as a sik. One or more of the genus *Coregonus* is said not

to be altogether without that peculiar odour which distinguishes the smelt.

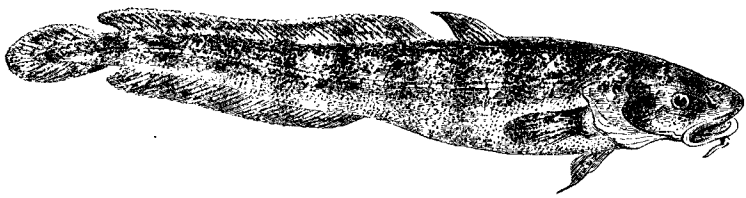
The sik has the character of being very voracious. Its food consists of smaller fishes, aquatic insects, especially the larvæ of spring flies, mollusca, thin-skinned crustacea, and the roe of other fish. It is said, indeed, not to spare its own roe.

In my neighbourhood, and in other parts of Sweden, the sik is in high request for the table, nearly as much so as the salmon tribe. The flesh is white and well flavoured, more especially when captured in the autumn, at which time they are usually fattest. The sik is eaten either fresh or salted; in the latter case without farther preparation. In some places it is smoked, which process is believed to enhance its flavour. In Lapland, it constitutes a considerable portion of the food of the inhabitants during the long winter.

In the Wenern the several species of *Sik* spawned, as mentioned, between the middle of October and the early part of December, and usually on sand banks or stony ground. Little seems to be known as to the proceedings of this fish during the lek. It is said, however, that the female rubs herself against stones, and thus facilitates the passage of the roe. The lek is believed to last about a fortnight.

In my vicinity, the several kinds of *Sik* mentioned were captured in large quantities, but chiefly during the spawning season; for at other times, as said, the fish confines itself principally to the deeps. Ekström also speaks of the abundance of this fish (*C. oxyrhinchus*) taken in the eastern Skärgård. And Faith tells us, that whilst residing at Frysenvold, the captures (consisting of Kröyer's *C. Lavaretus*) amounted to twenty thousand four hundred and

twenty-eight; one particular season to no less than six thousand; but he does not specify their weight. The sik is for the most part captured in nets; occasionally it is taken on night-lines, &c, but it seldom, I believe, touches the bait of the angler. In no single instance did we catch this fish when spinning for trout.



THE BURBOT.

Gadus Lota, Linn., "Retzius, Faun. Suec.," p. 322.
... ... "Nilss. Prod.," p. 47.
... ... "Ekström," p. 235.
Lota Molva, Cuv., "Kröyer," vol. II, p. 153.

The Burbot (*Lake*, Sw.; *Lota vulgaris*, Cuv.) is very abundant both in the Wenern and the Gotha. It is also found throughout nearly the whole of Scandinavia, from Scania northward to far beyond the Polar Circle. According to Kröyer, indeed, it is met with in the mountain lakes close to Alten, which is near to the North Cape itself. Of parts of the eastern Skärgård, where the water is less salt, it is likewise an inhabitant. In Denmark it is scarce. Kröyer makes mention of a burbot exhibited for money in Copenhagen no later than 1838. The advertisement ran thus: "By the royal permission is now to be seen a living and rare fish, called in Sweden, Lake," &c. According to the Swedish

naturalists, it is the only one of the *Gadus* family that lives in fresh water. There are few fish that have bodies so flexible, or whose movements are so serpentine or eel-like.

Though the burbot is found in lakes and rivers with clayey bottoms, it seems to prefer those that are stony. It is a somewhat solitary fish, and excepting during the spawning season, does not congregate in shoals. It is never seen near the surface, and except at the setting in of the winter, when it approaches the strand, always keeps to and swims near the bottom, (hence its Lappish name *Njaka*, or the creeper), where it hides itself amongst stones, sunken trees, &c., in readiness to pounce on its prey. Though apparently slow in its motions, it can, at will, swim with considerable quickness, as is evidenced by its capability of seizing other fish. Its habits appear to be roaming. M. Göbel speaks of an individual in the Wenern having travelled some fourteen English miles in the course of a single night, a fact attested by its retaining, when taken, the hook it had previously carried off.

The burbot is a great glutton, devouring almost everything that comes in his way, whether living or in a state of decomposition. But for the most part he seems to subsist on small fish, insects, &c. He is said to visit the spawning-grounds of other fish, to feed on their roe; occasionally, however, he makes a meal of larger fish.

"A burbot of twenty-three inches in length that I opened in the month of December," writes M. Ekström, "was found to have gorged a pike twelve inches long. The head of the latter, which lay bent at the bottom of the greatly distended stomach of its devourer was, with the exception of the teeth, nearly dissolved, whilst the tail, which was much torn, stuck out from between its jaws. It seems almost

incredible that the pike, before its suffocation, had not ruptured the stomach of its assailant."

The burbot is very tenacious of life, and lives very long after being taken out of the water, and that without the skin drying up, which seemingly depends on the abundance of his slimy secretions. Fishermen, to kill him, are accustomed to sever the *Gäl-näs*, or the flap of the gill. This is done in consequence of the popular notion that he would otherwise devour his own liver, which in Sweden is looked upon as the most dainty part of the fish.

None of the Scandinavian fishes are held in higher estimation for the table. But perhaps it is to the savoury sauces with which it is usually served up, that its great reputation is mainly attributable. The flesh is white, firm, and boneless, and the liver is considered an especial luxury. The old story as to the roe being unwholesome, is at the present day looked upon as a fable, and vast quantities are now annually consumed in Sweden. Very good caviare is also prepared from it.

But it is not for the table alone that this fish is valuable. Certain portions of its body, as with the Ostiacks, are used by the common people for medicinal purposes. The oil, which flows spontaneously from the liver, is converted into eye-salve; and the cœcal intestines are dried and pulverised, a tea-spoonful of which is taken at intervals as a preventive for the ague. The skin, again, when recently taken off, is wrapped round fractured glass vessels, to which, when dry, it firmly adheres, and renders them water-tight. When well rubbed with fat or oil, it is partially transparent, and in some countries is used in lieu of window-glass. Of the swim-bladder, or sound, isinglass is made.

With us the burbot spawned about Christmas, or a little later. Swedish naturalists assign the month of March as the spawning season in the Wenern, but in this there must be some mistake. The place where the lek is held, called *Lak-ås*, or burbot-bank, has usually a sandy bottom. From the small size and great number of the eggs, the fecundity of this fish would appear to be considerable. It is on record, that one hundred and seventy-eight thousand eggs have been found in the body of one female. The young are said to appear within a few weeks of the deposit of the roe, and to be in their third year capable of procreation.

The burbot attains to a very considerable size in Scandinavia. Swedish and Danish naturalists assume eleven pounds as its maximum weight. Pallas affirms that it grows to the length of two feet. In the Wenern, as also in the large lakes in Wermeland, it is, to my knowledge occasionally taken of twenty pounds weight. The Kållandsö fishermen assure me, indeed—and I am inclined to believe their statement—that though they themselves never captured a burbot much exceeding twenty pounds, they on a particular occasion saw one in the Lidköping market that weighed thirty pounds. It was so large and so forbidding in appearance, they said, that no person would buy it.

The devices adopted in Sweden for the capture of the burbot are very numerous, but in general very simple in their nature, as the fish is by no means cunning.

Of the various contrivances more will be said hereafter; but one, called *att döfva*, or to stun the fish, may be mentioned here. The operation is effected in this manner:

At the commencement of the winter, and a little prior

to the spawning season, the burbot frequently seeks the shallows. When, therefore, the water becomes slightly frozen over, the fisherman, armed only with an axe, proceeds slowly and cautiously along the newly-formed covering; and as soon as he observes the fish lying beneath, he strikes the thin ice immediately above its head a heavy blow with the back part of the axe, which has the effect of stupifying it for a time, when he draws it out through an aperture cut in the ice.

The Eel (*Ål*, Sw) is common both in the Gotha and the Wenern. Singularly enough, however, this fish was unknown in my neighbourhood until about fifty years ago, owing, as supposed, to the Falls of Trollhättan impeding their progress from the sea. But when sluices were formed at that place, and a traversable communication opened, the eels immediately appeared in the waters above. An old and experienced fisherman, residing on the banks of the Wenern, assured me, indeed, that it was during his own childhood that the advent of the fish first took place. With the exception of the far north, the eel is common, I believe, throughout the Scandinavian peninsula.

Swedish and Danish naturalists seem not quite agreed as to the number of species of this fish that exist in Scandinavia. Nilsson speaks of two fresh-water eels, and Kröyer of an equal number or more, but as yet he has not concluded the subject. In my neighbourhood there were certainly two species; the one was called by the fishermen the *Elf-Ål*, or river-eel, which had a broad nose and prominent teeth, and answered probably to the *Anguilla latirostris*, Yarr.; and the *Näbb-Ål*, or sharp-nosed eel, whose teeth were less prominent, which was most likely

the *A. acutirostris* of Yarrell. Unfortunately, however, I did not bring specimens to England, for their proper identification.

The eel feeds chiefly during the night. In the day-time he lies embedded in the mud, where he forms for himself a lair, from which there are several outlets. The whole winter, from the end of November to the beginning of April, they hibernate in the mud, not unfrequently, it is said, at a depth of three feet, and apparently in groups. I judge so, from seeing fishermen, after discovering their whereabouts, impale them one after the other with a long and slender spear, called *Ål-gel,* almost as fast as the weapon can be got to the bottom.

Naturalists do not agree as to some of the habits of the eel. Ekström's remarks on this subject, are deserving of attention.

"It has been the belief," he tells us, "that during the spring, when its wanderings commence, it betakes itself to rivers and streams, the course of which it follows to the sea. But this is a palpable mistake. It is true that the eel, at that season, seeks rivers, but arrived there it goes just as often against as with the current. That the eel should only follow the stream is probably affirmed, because in all large eel-fisheries, the opening of the trap faces the stream, by which the fish allows itself to be borne forward in the same manner as the bream, by storms. In this vicinity the eel is often captured in traps, whose openings are placed *with* the current. I believe that the eel seeks rivers early in the spring, because after its long winter sleep, it there finds a greater abundance of food; and that as the spawning season approaches, it

allows itself to be carried by the stream to the lake, where the lek is held."

The eel is afraid of noises. Of thunder he has great dread, and during its continuance is always in motion. Should a thunder-storm arise in the daytime, he at once leaves his place of concealment, as is manifest from his being frequently taken in nets at such times.

This fish is also afraid of bright objects, which it carefully avoids when such come in its way. Fishermen aver, indeed, that if a birch pole, stripped of its bark, is sunk to the bottom of the stream, no eel will venture to pass over it.

It may not be generally known that the eel can move as rapidly backwards as forwards. Hence when entrapped, if he can once get his tail through the interstices of his prison, he usually manages to set himself free.

The eel, as is well known, is very tenacious of life. In parts of Sweden the fisherman, to prevent its getting out of the boat, after wrapping the skirt of his coat, or what not, around the fish, grasps it near the head, and bites it across the neck, so that the spine is crushed, and death ensues.

Formerly all sorts of tales were told as to the propagation of eels. As for instance, that they were bred from manure, from the bodies of decomposed animals, from placing together two tufts of grass wet with dew; as also, that they could be produced at pleasure by merely casting small pieces of eel-skin into still water, &c. Even to this day, the common people in some parts of Sweden, firmly believe that all the eels in any one lake are born of a common mother, and that such a general parent is found in every lake inhabited by this fish.

For a long time it was a disputed point as to whether the

young eel did not come into the world alive; and it has been only very recently admitted, I believe, that the eel breeds in the same manner as other true bony fishes.

Ekström has some pertinent remarks on the propagation of the eel, the result, he tells us, of attentive and long-continued observation; but it is probable that when he wrote, he had not seen all that has been published on the subject by the naturalists and comparative anatomists of continental Europe.

"About the middle of June," he says, "when the days are calm and warm, the eel congregates in shallows with clayey or soft sandy bottoms, abounding with the common reed (*Arundo Phragmites*, Linn.) Afterwards it ascends somewhat from the bottom to about mid-water, where it entwines itself in a spiral form around a reed, and moving its body in a peculiar manner, causes the reed to swing to and fro like a pendulum. The opening of the vent in eels captured at this time is much swollen, and a dark yellow fluid, resembling oil, issues therefrom. If the fish be cut open, the sexual organ is found partly filled with this fluid. That this is a real spermatic fluid I infer, as well from its never being found in eels captured during the winter or spring; as from the fact that it is first observable on the approach of the spawning season, as a thin whitish fluid, but obtains consistency, and the oil-like appearance spoken of, when the lek actually takes place — characteristics which disappear altogether when this is over. I have never found roe in the body of the eel, but I nevertheless believe that it is through the deposit of eggs that the fish propagates its species; for when spermatic fluid is evidently found, one may with full certainty conclude that, although the females

of this species are in inverse ratio with those of some other kinds of fish, and consequently less commonly seen than the males, eggs are also to be found.

"I have frequently seen eels with so-called young ones in the cavity of the abdomen, and at times near to the vent itself; but on close inspection, they have all proved to be intestinal worms (*Echinorhyncus tereticollis*, Rud.), by which this fish is much troubled."

From personal experience, I can say nothing as to the period when the eel spawns. One fisherman in my neighbourhood imagined it to be about the dog-days, which nearly agrees with Ekström's supposition; but in general these men professed total ignorance of the subject.

The eel attained to a considerable size with us: in the Wenern, certainly to ten or eleven pounds. My own fisherman assured me, that his father captured an individual weighing fourteen pounds; and mentioned, moreover, that to his knowledge an eel, taken in a lake in Dalsland, was some years since brought into the town of Wenersborg for sale, that weighed no less than eighteen pounds.

The River Lamprey (*Nejnöga*, Sw.; implying nine eyes; *Petromyzon fluviatilis*, Linn.) was common in my vicinity; as also, I believe, in the more middle and northern parts of Scandinavia.

The Sea Lamprey (*Hafs-Nejnöga*, Sw.; *P. marinus*, Linn.) was found occasionally in the Gotha, not exactly in my vicinity, however, but below the cataracts of Lilla Edet, situated at about twenty miles to the southward of Ronnum, and forty from the sea.

Swedish naturalists also include Planer's Lamprey (*P. Planeri*, Bloch) in the Scandinavian Fauna, and say it is

found in almost all rivers, whether large or small, in the more southern portion of the peninsula.

They likewise include the Pride, or Sandpride (*Linål*, Sw.; *P. branchialis*, Linn.) in their Fauna, but they give us no information as to the whereabouts of this fish, farther than saying it is met with in rivers and streams, and that it spawns in April and May.

The Cray-Fish (*Kräfta*, Sw.; *Astacus fluviatilis*, Fabr.), which though belonging to crustaceæ, may without much impropriety find a place here, was pretty plentiful with us, though more so in the neighbouring brooks than in the Gotha or Wenern. It is also common in most parts of Scandinavia.

Formerly, however, when the eel, its reputed enemy, was unknown in my part of Sweden, the cray-fish is represented as having been much more abundant than at present; and that since the opening of the sluices at Trollhättan, and the consequent invasion of the eel, the numbers of the cray-fish have very sensibly diminished.

It is said of the cray-fish, that started adrift anywhere on dry land, instinct at once points out to it the direction of its native element, towards which it at once makes its way, as if steering by compass.

It is also said of the cray-fish, that if placed in ponds, &c., to which they are inimical, they will presently disappear altogether, when the inference is, that they are either dead, or have made good their escape; but that if a careful search be made, they will be found to have taken refuge in the top of some tree or other in the vicinity! The story seems marvellous; but I have heard veracious people tell it, and if I mistake not, that they themselves were eye-witnesses to the fact.

In the interior of Sweden, where access to fish is not always easy, much store is set by the cray-fish, and it frequently constitutes a principal dish at the feast.

Various devices are adopted to effect its capture; but it is often taken with rod and line, in which sport the fair sex occasionally take part; and I have known ladies, young as well as old, recount with much glee their exploits in this way.

It is a pity that more frequent attempts are not made to introduce into England fish that are foreign to our Fauna. That there are no insurmountable obstacles in the way, is evinced by the decided success achieved by the late Earl of Derby. Under date of the 24th of February, 1848, his Lordship wrote me from Knowsley Park as follows:

"You ask me if I take as much interest in the finny tribe as in the feathered race. I cannot say *as much;* but I have lately succeeded in introducing into our water here several of the fish from other parts of the island. I have brought Trout from Islay in Scotland, Gwyniad from Wales, and Charr from Westmoreland, and have even brought as many as over four hundred, without losing more than the odd surplus . . . . I have had some thoughts of sending my fisherman over into Germany for the purpose of trying to obtain, and to convey over the Channel some of their most esteemed fish, such as the golden or Prussian Carp, the Pike-perch, and two or three others. Are there any in your vicinity that would be desirable and worthy of being *transported,* not to New South Wales, but to Old England? If my man could meet with anything like the success he has hitherto had in this way, in Great Britain, I should have no fears about being able in a short time to establish them here."

In reference to the science of natural history, it will be long, I fear, before so distinguished a patron and benefactor will be found as the late Earl of Derby—a nobleman who was all kindness to myself, as to every one else with whom he had intercourse. His menagerie, aviary, and museum at Knowsley, were truly worthy of an English nobleman, equalling, indeed, if not excelling many royal collections. The living animals amounted to one thousand six hundred and seventeen in number, and the space appropriated to their accommodation, extended over upwards of one hundred acres. By his munificent exertions, we have been made acquainted with many new animals from distant lands, and at boundless cost to himself. He effected additions to our Fauna, from which England will be lastingly benefited. Few men, indeed, in the comparatively private walks of life, have ever rendered their country greater services than did the late Earl of Derby.

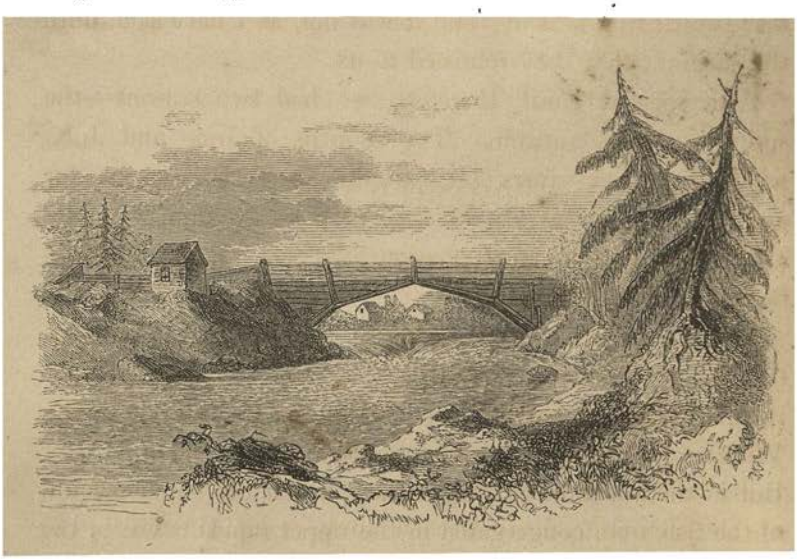
CHAPTER IX.

FISHING RIGHTS—NY-BRO—TWO SEASONS—SIZE OF FISH—THE FLY—SPINNING—BOATS NEEDFUL—TROUT HOOKED FOUL—SINGLE GUT—ANECDOTE—SELF-DESTRUCTION—PIKE FISHING—IDE FISHING—PERCH FISHING—TRAGIC OCCURRENCE—KÄLLSHAGA—FATAL ACCIDENT—FISHING LIST—CONCLUDING REMARKS.

THE fishing in my neighbourhood was very good; better could hardly be found anywhere, not exactly on account of the actual quantity of fish to be taken in a day, but because fish of some kind or other were to be killed with the rod during the greater part of the year. Even in the depth of winter, provided the weather was mild, which happened at times for several consecutive days, sport with the rod was obtainable. On one occasion during the Christmas holidays, indeed, I brought home a heavy basket of fish taken in the deep pools near to the house.

The fishing rights attaching to Ronnum were considerable; and through the kindness of several of the neighbouring proprietors, who made over to me their privileges, and by

purchasing those of others, I, after a time, got a large portion of the waters thereabouts into my own hands; as prior to my settling in that part of the country, however, people had been accustomed to do much as they liked, the enforcement of these rights subjected me to considerable trouble and expense, and what was infinitely worse, brought on me, on the part of many, no little ill-will.



NY-BRO.

For several miles below Ronnum, the Gotha was somewhat sluggish; but from opposite to the house up to the Wenern, a distance of from two to three miles, the stream presented a succession of rapids and pools, in appearance the finest imaginable for angling. Some idea of the nature of the water and the scenery in my vicinity may be formed from the above sketch, kindly drawn for me on the spot by

Mr. W. Collett, representing *Ny-Bro*, or the New Bridge, spanning the Gotha at no great distance from Ronnum, and on the high road leading to Wenersborg.

Though some trout—and it was to this fish my attention was chiefly confined—remained in the Gotha all the year round, by far the larger portion left us in the early part of the summer, and ascended the stream to the Wenern, where they passed that season; and it was not, as I have said, until the autumn, that they returned to us.

As respected trout, therefore, we had two seasons—the spring and the autumn. The months of June and July, which in other rivers are usually the best months for angling, were to us almost a blank; for though we could always kill fish, a heavy basket was not at that time to be calculated on.

The fishing at Ronnum had also this singularity, that in the spring months good sport was generally obtainable in the rapids about the house; whereas in those near to the Wenern, it was then hardly possible to kill a good-sized fish. But in the autumn, on the contrary, by far the larger portion of the fish were congregated in the upper rapids, while in the lower it was a rare event to take a large trout.

Our spring fish were far from being in such good condition as those taken in the early part of the autumn; partly because they had not fully recovered from spawning, and partly, it is to be supposed, because they had been on short commons during the winter. Those caught in the early part of the fall were, on the contrary, excessively fat, and were heavier by several pounds. In the spring we seldom killed trout much exceeding twenty pounds weight, but in the autumn a twenty-four or twenty-five pounder was an almost

every-day occurrence; and we often took them still heavier. I myself, indeed, captured with the rod alone several of at least thirty pounds each.

It was remarkable that though during spring and autumn we took great numbers of small as well as heavy trout, few were met with of an intermediate size. This was more especially the case during the autumn. Our trout at that time weighed either from one to three pounds, or from ten to thirty pounds. I, therefore, came to the conclusion, that a large portion of those bred with us in the Gotha, either remained in the Wenern until well grown, or that they proceeded up its tributary streams in the north; and this idea was strengthened by the fact that ten to twenty thousand trout (called *Lax*, or salmon), are annually captured at a fishery on the Clara River, in Wermeland, averaging about six to seven pounds each—the sized fish of which we saw so few in the Gotha.

It was observable that the larger and the smaller trout associated very little. Unless we more especially sought out the lesser in the shallower rapids, we might often, when trying for the larger fish, work for a whole day without taking a single one.

The fly succeeded well with the smaller trout, but not so well with the larger; partly, no doubt, owing to the depth at which the latter usually lie preventing them from seeing it; but as they took bait pretty freely, I, of course, gave the preference to spinning. Bait had besides this advantage, that, independently of trout, one was pretty sure to make a basket, with pike or other fish, which would not have been the case with the fly.

In some few of the pools and rapids about Ronnum, one

could fish from the shore; but generally speaking, owing to the nature of the ground, and the great breadth of the river, it was only with the assistance of a boat that much execution was to be done; and as there was more than one insurmountable rapid on the river, I usually had a boat stationed at the head of each, so that by changing from one boat to the other, I could, in the course of the morning fish to advantage the greater part of the river; and the ground and the scenery being thus diversified, tended greatly to enhance the amusement.

In calm weather I rarely had more than one boatman; but when blowing hard, especially if the wind was down stream, a second was generally required, as well in order that the boat might be under better control, as that in the event of hooking a heavy fish, and his taking up stream, we might be able to keep our proper place, not always practicable with a single pair of oars.

When one of the large trout was fairly hooked, he was usually landed in the course of ten minutes or a quarter of an hour. But this was greatly attributable to the advantage a boat gave us, and to the river, in some parts, being studded with islets or rocks, which afforded us ready means of landing ourselves, and gaffing him.

If, however, he was hooked foul, as not unfrequently happened, the chase might be long and arduous. I remember, in one instance, getting hold of a big fellow by the dorsal fin, in a rapid immediately near to the Wenern itself; but in spite of every effort on my part to stop him, he brought us more than a mile down the river. During the descent we landed on four or five different islets, in the hope of bringing him up; but so soon as sufficiently near to sight

us, he was off again in double-quick time, and we had only to follow in his wake as before. At last, however, he was all but beaten; but just as we were thinking of securing the prize, the hook lost its hold, and to our greater chagrin he sailed away uninjured!

But although the large trout, unless hooked foul, were commonly killed pretty readily, they occasionally gave us much occupation before we could call them "our own;" and this more especially early in the autumn, when the fish were in the highest possible condition.

One fine evening in the middle of September, for instance, just as the sun was sinking below the horizon, and the clock in Wenersborg striking seven, I hooked from the boat a huge trout. I was fishing *with single gut*, my usual practice when the water was clear. With such fine tackle I could not, therefore, pull quite so hard at the fish as I otherwise should have done. Nevertheless, as night was fast approaching, I gave butt, as fishermen say, even to the endangering of my line. All would not do, however; for although he allowed *himself* to be led from islet to islet, and from one landing-place to another, I could never get him sufficiently near for the gaff to be used effectively. At length it became quite dark, and my people thinking the case desperate, advised breaking the line, and letting him off; but being resolved to see the affair out, even if obliged to remain on the river the whole night, I sent for a lantern, which enabled us in some degree to discern what we were doing. The fish, however, still stuck to the bottom of the stream, which thereabouts was very deep, and twice he got foul amongst the weeds; but by rowing round him, we were in both instances fortunate enough to extricate the line; and at length, after he had

been hooked exactly three hours, we had the fish—a noble male *Krok*, weighing twenty-six pounds—high and dry on the strand. Had he fought for only a very few minutes longer, however, he must inevitably have escaped; for of ten hooks, only one—the lip-hook—remained, and even the lashing of this was partially torn away by the teeth of the fish.

Many people make quite a merit of killing a trout of a few pounds in weight with single gut; but by tolerable management, and with the aid of a boat and a skilful rower, single gut will hold a fish of almost any size. We frequently used nothing else, and caught great numbers of trout equally large as the one just spoken of. It is true that occasionally single gut has broken with me, and so has the best twisted gut; but in almost every instance this has arisen either from a flaw in the gut itself, its coming in contact with a stone or other impediment at the bottom, or that the gut has been frayed by the teeth of the fish. If the rod has proper play, and the fisherman does his part, almost any sort of tackle is strong enough to hold a fish of the largest size. When spinning in deep rapids, one runs the greatest risk; for being unable to see the curl of the fish as he takes the bait, it not unfrequently happens that in the twinkling of an eye the line is going off the reel at railroad pace, when if not upon one's guard, or if the line becomes entangled, all is of course irretrievably lost.

A singular incident once occurred to me whilst fishing in the pools close to Ronnum. Observing at a little distance several large trout, plunging on the surface in pursuit of a shoal of young smelts, we rowed to the spot; when, casting the bait amongst them, one of the

number immediately seized it with avidity; but owing to a flaw in my casting-line, which was of the best twisted gut, it parted at the upper lead in striking the fish, and he went off, as I supposed, uninjured. I was, of course, much annoyed at the mishap; but there was no help for it: so causing the people to put me on shore, that I might repair the tackle, I directed them in the interim to proceed two or three hundred paces farther down the stream to the boat-house, for other baits, those which we had brought with us being exhausted. They did so; and returning in about a quarter of an hour afterwards, jokingly asked if I should like to see the hook recently carried off so unceremoniously by the trout. I smiled, conceiving the thing an impossibility; but they produced, not only the hook, but the fish itself—a fine fellow of about sixteen pounds. It appeared that in rowing down stream, and when in very deep water, they saw him, evidently much distressed, and with his belly uppermost, plunging on the surface, when, having a large landing-net, they at once rowed to the spot, and placing it under him, lifted him on board.

I could never quite comprehend this matter, for the fish was fairly hooked in the mouth, and the weight of the leads was trivial; but I suppose the disabled state he was found in must have been caused either by the hook piercing both jaws, or that the casting-line had twisted about his gills, and thus prevented him from respiring freely

A similar circumstance, but not attended with equally fortunate results, occurred to me at an after period, when fishing in the great pool immediately below Ny-Bro; for though the fish, shortly after breaking the line, was seen in

an eddy in the like helpless state as the one spoken of, there were no appliances at hand to secure him, and he therefore got off. This, however, was not so remarkable a case as the one mentioned, for I had played the fish for a considerable time before he escaped, and that in very broken water; and in addition to the leads, hooks, &c., he carried away a large portion of the line itself, which must of necessity have tended greatly to encumber his movements.

At times I had great sport with the huge trout. Independently of other fish, I on two or three occasions captured seven, and on several occasions six of these fish within the day; weighing one with another sixteen to eighteen pounds.

One particular season I took twenty in the course of four consecutive days (and what is singular, no others in that time, to my knowledge, touched the bait) that weighed together four hundred and fifty-two pounds, which is upwards of twenty-two pounds each on the average. Their large size was accounted for from their being not only in high condition, but all males, which, as said, are considerably larger than the females.

The fish last mentioned were taken in the upper rapids, where the heavy trout chiefly congregated during the autumn; and this being the case, I was, therefore, accustomed at that season to make Källshaga—situated on the left bank of the Gotha, above a mile from Ronnum—my chief fishing station in the fall of the year.

A friend resided here; but the house, or rather cottage, is so embosomed amongst trees, as to be but little perceptible either from the river, to which it is immediately contiguous, or from the high road leading from Ronnum to Wenersborg,

that passes at no great distance in its front; and as the distance from home was considerable, myself and friends were accustomed, when fishing at Källshaga, to take provisions along with us, and to enjoy our humble meal beneath the shelter of an umbrageous oak, of which there were several in the park-like, though exceedingly limited grounds.

VIEW OF KÄLLSHAGA.

The annexed drawing, kindly made for me by Sir Thomas Maryon Wilson, gives a good idea of the spot, the nature of the rapids, and the manner in which we were accustomed to fish.

The Pike fishing at Ronnum was good, especially during the first few years of my residence there, and I occasionally captured a good many; but in general they were somewhat

small. The largest I myself ever took did not weigh above seventeen pounds, but my people captured two or three of twenty-five pounds.

We also killed some Ide—an odd one occasionally when spinning for trout or pike, but chiefly with the fly.

This fish does not rise to the fly in the same free manner as the trout or the grayling, but sucks it, as it were, into his mouth. This being the case, when angling expressly for the ide, we moved the fly—always a rather large one—very slowly; and the better to conceal the hook, as well as to tempt the fish, we usually affixed to the point of the hook a maggot, or what was preferable, a large grasshopper, or black beetle, divested of its wings. The fly, however, could not be used to advantage excepting when the weather was fine, warm, and calm, as at such times the ide is to be seen in shoals near to the surface; for if, on the contrary, the weather is cold and boisterous, these fish always remain in deep water, and, as a consequence, it is next to an impossibility to induce them to take the fly.

When fishing from a boat for the ide, as was our custom, the boat's head was always kept up stream; and whilst the fisherman who stood in the stern sheets, cast the fly to the right and left, the boat was allowed to drop slowly and quietly with the current, so as not in any manner to disturb the water below.

Considering this kind of fishing rather tame, I rarely engaged in it, but occasionally allowed my man to amuse himself, and who thus did considerable execution. At times, indeed, he would take twelve or fifteen ide in the course of a few hours.

One season in particular we captured one hundred and fifty of these fish, the average weight of which was near three pounds each; and had we devoted ourselves to the sport, we might probably have trebled that number.

Perch were tolerably plentiful in my immediate neighbourhood. When spinning for trout or pike, I occasionally caught one; but I never regularly angled for those fish. My people, however, not unfrequently killed a good dish. But the perch fishing in the Wenern was by all accounts much better than in the Gotha. An experienced fisherman, a friend of mine, living near to the northern shores of that lake, states that on some occasions, especially about Midsummer, two persons, fishing from a boat, may take with the rod alone, in the course of three or four hours, fifteen to eighteen lispund—that is, from three hundred to three hundred and sixty pounds weight of those fish.

When perch rove about in shoals near the surface, in pursuit of small fish, as is the case in the height of summer, the most execution is to be done; for by backing the boat warily and slowly (with muffled oars all the better) in the wake of the shoal, it is the fisherman's own fault if he cannot make a good basket.

In one instance, and this was immediately near to the house, my man, who at the time was fishing for ide, observing a shoal of perch thus roving about, captured ten or eleven pounds weight of perch, in about half-an-hour, with no other bait than a large blue fly.

The heaviest perch that we ever killed at Ronnum did not weigh more than three pounds; but it was said that some were to be found weighing five pounds each.

A skilful boatman was very necessary when fishing among

the rapids of the Gotha, as in such situations the slightest mismanagement might have jeopardized us. Though on several occasions nearly meeting with an accident, we always escaped. Once, indeed, owing to the inadvertence of the man, we were within an ace of being carried under Ny-Bro, the bridge depicted a page or two back, in which case, from the force of the current, and the terrible eddies in the pool below, the chances would have been much against us.

Though not very frequently, accidents did occur once now and then, and in my time several individuals were drowned; amongst others, two poor young women in the service of a family resident near the banks of the river. It was in the middle of summer, and they had gone, as was their custom, to bathe in a shallow hard by the house, when by some mischance they were swept away by the current. A boy, tending cattle in the neighbouring pasture, hearing their cries, hastened to the spot, but one of them had then sunk altogether, and the other, supported apparently by her clothes, was floating down the rapid; but there being no assistance at hand, she also was presently engulphed. One of the poor creatures could swim a little, and it was believed that in her endeavours to save her companion, she herself lost her life. I was not far distant at the time, and as soon as intelligence of what had happened reached me, hastened to the spot; but though we searched the river and its banks far and near, nothing was to be seen of these unhappy young women; and it was not until some days afterwards that their bodies were found in a pool below.

To give a better idea of the fishing at Ronnum, I subjoin a list of my individual performances with the *rod* during one particular season. Two or three other seasons, however,

were almost equally good; but this list is independent of fish taken by friends or by my fisherman, the weight of which was about as great. It is farther to be observed, that following the custom of the country, we classed the smaller trout, or those weighing a pound or two, as Öring, or trout, and the larger, or those of from eight to ten pounds or upwards, as Lax, or salmon; as also, that the weights were Swedish, which are about six per cent less than ours.

Fish.		lbs.
120	heavy Trout (Lax) . . .	1796
75	smaller Trout (Öring) . .	201
15	Perch	15
364	Pike	827
1	Pike-perch	4
5	Ide	21
580		2864

But as respects fishing, it is not likely Ronnum will ever again see those palmy days, for the waters thereabouts are now either open to every one, or insufficiently protected; and what is worse, where there was formerly a single fisherman, there are now multitudes.

CHAPTER X.

LAND-NOT — NOT-VIND — LÄGG-NÄT — SKOTT-NÄT — PULS — DREF-GARN — CASTING-NET — VIDE-MJÄRDE — ÅL-KUPA — CIRCULAR GARN-MJÄRDE — PLAN OF GILLRING — FLAT-BOTTOMED MJÄRDE — SÄNK-MJÄRDE — RYSSJA — VERKE — VETTE — REF-LÅDA — DRAGG — KRAKA — KLÄPP — VITTJE-HÅP — PLAN OF BAITING HOOKS — TRIMMERS.

BESIDES the rod, we occasionally had recourse to other expedients to beguile the finny tribe. In Scandinavia the devices for this purpose are very numerous; which is little to be wondered at — for, as in other pastoral countries, studded with innumerable waters,* the inhabitants are, in degree at least, dependant on fishing for support; necessity, as a consequence, has proved the mother of invention. Very many of the expedients in question are probably known to us, but some may be new, or brought into play differently; and at the risk, therefore, of tiring the patience of the reader, I venture to enumerate such as came more or less under my own observation.

* M. af Forsell in his "Statistik öfver Sverige" informs us, that about a tenth of the area of the Scandinavian Peninsula consists of lakes and rivers!

Nets of various kinds were in general use in my vicinity. We had, for instance, the *Land-not*, or drag-net; often also called the *Vada*, from *vada*, to wade, for the reason that, being seldom used, excepting in comparative shallows, the fishermen, to work it properly, are obliged to stand, or wade in the water.

FIG. 1.

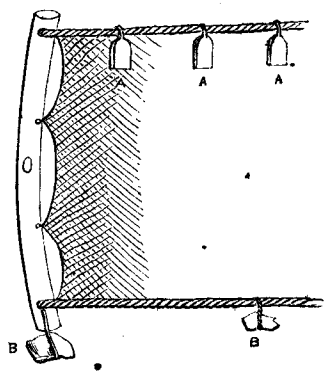
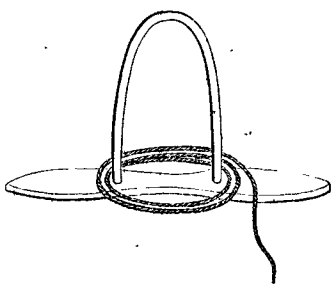


FIG. 2.



THE NOT-RACK AND THE BÅGE.

The Swedish drag-net, in form and construction, is nearly a counterpart to ours; but it differs from it in this particular, that the extremity of either arm or wing is provided with a so-called *Rack* (Fig. 1); as also that, instead of corks, the *Flarn-telna*, as the cork-line is called, is provided with *Flarn* (Fig. 1, A A A)—that is, oval pieces of wood previously charred, to render them more buoyant, about five inches in length, four in breadth, and half an inch in thickness; and the *Sten-telna*, or lead-line, is provided with round and smooth stones (B B), or it may be with the horns of goats, or small cattle, instead of leads.

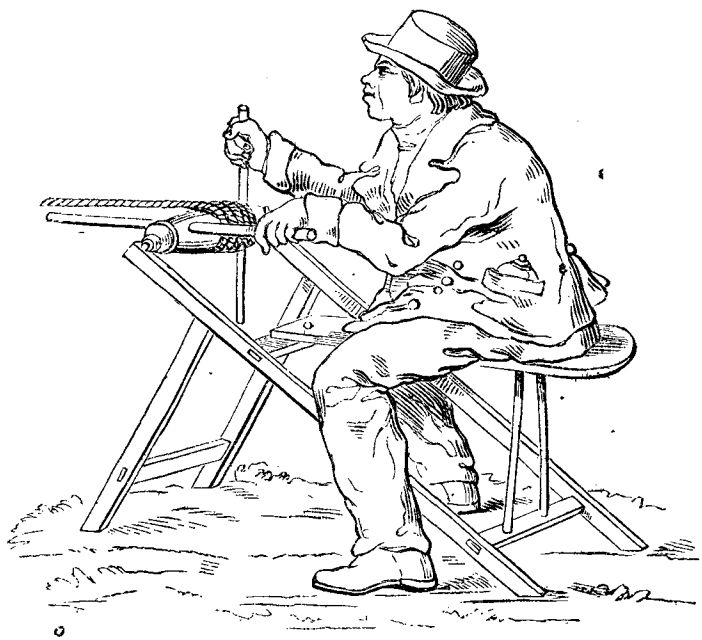
The hauling-lines, which, should the strand be shallow, are at times one hundred fathoms or more in length, are either of hemp or of *tög*—that is, the smaller roots of the spruce-pine split into fibres—or of *bast*, which is the bark of certain trees,* prepared in a peculiar manner; but the latter is preferred as being more manageable and less liable to rot.

When the hauling-lines are of great length, and to facilitate their transit from place to place—which is of constant occurrence, as the net converges towards the shore—the fisherman is provided with a *Båge*, or bow (Fig. 2), that is placed at his feet, and on which he coils the line as it is hauled in.

The drag-net in general use with us, though there were others of much larger dimensions, was some thirty fathoms in length, and from eight to ten feet in depth. Two men could handle such a net with facility. Moving from place to place on the shore, or from islet to islet, I have seen the same individuals make twenty to thirty casts at the least in the course of a long summer day; and it was no uncommon thing for them to half fill their boats. No later, indeed, than the past autumn, I myself saw two boats, with two men each, return home one evening with upwards of one thousand pounds weight of pike, perch, bream, &c., that they had thus captured during the day. But though this was great work, I have known the fishermen to be much more successful.

* Of the linden-tree in preference; it is prepared in the following manner: In the month of June, when the bark separates most readily, as long slips as possible are peeled off either from the stem itself, or from large branches. These slips are immersed in water; and stones, blocks of wood, or other weights placed above to retain them at the bottom. Here they remain for about three weeks, until the outer bark separates from the inner, when the latter may be taken up, dried and prepared.

The use of the drag-net is not confined to the summer alone; for even in the depth of winter, when the ice is of great thickness, it is brought into play, as was said when speaking of the yellow bream, with very considerable effect.



THE NOT-VIND.

Though the drag-net may usually be managed by two to three men, it is at times of such enormous dimensions, especially in the Skärgård, as to require the aid of more. In some places, therefore, to save manual labour, recourse is had to the *Not-Vind*, or net windlass, as depicted above.

Then we had the *Lägg-nät*, or stationary net (with us called the *Stånd-garn*), which answers to our flew. As with the latter, it was provided with *Grimma*, or walling (often on both sides), the purpose of which is, that when the fish strikes the net, and carries that portion with which it comes in contact into the walling, it may then be embedded in a sort of purse, whence retreat is next to impossible.

The Lägg-nät is used as well during the winter as the summer, and at the former season by something like the same process as the drag-net.

And as fish usually follow the direction of the shore, it ought not to be placed, so Swedish fishermen tell us, parallel with, but at right angles thereto.

The dimensions of the Lägg-nät, and the size of its meshes, vary according to the kind of fish which it is intended to capture. That in use with us for salmon and trout, was about sixty feet in length, and its depth twelve feet. The upper telna was provided with ten to twelve of the flarn, or floats spoken of, and the lower line (placed exactly opposite to the flarn), with *pungar*, or purses, formed of the bark of the birch-tree, and filled with pebbles. The flarn had only sufficient buoyancy, however, to keep the net properly distended, but not to lift it from the bottom, close to which it was always kept, and frequently at a depth of several fathoms from the surface of the water.

The *Skott-nät*, likewise a flew in its way, was also provided with walling; but it differs from the Lägg-nät in this respect, that whereas in the latter, the fish capture themselves, they on the contrary are driven, per force, into the Skott-nät.

The Skott-nät is made of very fine twine, and the weights and floats are of the lightest descriptions. The size of the meshes is adapted to the kind of fish for which it is used. The length is commonly from fifty to sixty feet, and the depth from four to six feet; that is, if intended for a single hand, but if for two hands, it is of more considerable size.

The Skott-nät is seldom used, excepting on fine and calm summer days, when the finny tribe seek the shallows. It is then cast out in silence immediately near to reeds, bordering the shores of a lake or river, or it may be among them; and when the net is fixed, the fisherman commences splashing and disturbing the surrounding water, thereby to drive the fish into the toils.

THE PULS.

For this purpose he makes use of a *Puls*. This consists of a slender pole, fourteen to sixteen feet in length, the upper end of which is flattened and pointed, to render its insertion in the bottom easier, when used to fix the boat. The other extremity has a clump of wood, conical in shape, and hollow inside which being driven downwards into the water, creates by its size, and the air contained in it, the greater commotion and noise.

The address with which those conversant with the Skott-

nät manage it, has often excited my admiration, and under favourable circumstances it proves a very successful device.

FIG. 2.

FIG. 3.

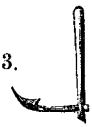
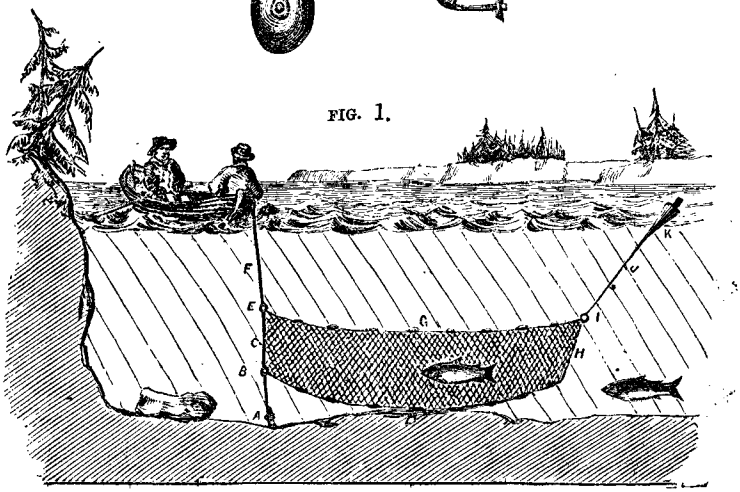


FIG. 1.



THE DREF-GARN.

We had likewise a net called *Dref-Garn*, or driving-net, which was used for the capture of more than one kind of fish.

That intended for salmon, or heavy trout, is composed of pretty stout twine, its length being about forty feet, and its depth in the centre (both ends being drawn up to form

purses or bags to stop the fish) about twelve feet; the meshes are about four inches square. Nine to ten small egg-shaped pieces of wood, usually turned for the purpose, are strung at equal distances apart, on the upper telna, instead of corks or flarn; and the like number of small circular pieces of iron, in lieu of leads, on the lower telna; and as the floats and the weights are made fast, and as in the intermediate spaces there is abundance of loose meshes, the fish—let him strike the net where he may—enters a sort of bag, and is pretty sure to be at once enveloped in its folds.

A perfectly smooth and circular stone (Fig. 2), which with propriety may be called the feeling-stone, forms a leading feature of the Dref-Garn. It is about six inches in diameter, by three or four in thickness, and revolves on an iron axle, passed through the centre, thus forming the base of a stirrup as it were.

This revolving stone is attached to the loop B, at the lower extremity of the side line C, where it forms an angle with the bottom line D. To the upper part of the side line C again, is affixed, by the loop E, the hand-line F, which is stout, and of considerable length. To the outer extremity of the upper line G, and at the angle formed by its junction with the side line H is attached, by means of the loop I, the *Dubb-linie*, or line J, which is of the thickness of pack-thread, or somewhat stouter. And fastened at the end of this again is the *Dubb* itself K, consisting of a piece of deal, or other light wood, of the size and shape of a very small sugar-loaf.

Two men are required to work the Dref-Garn—one to manage the boat, the other (whose station is in the stern-sheets)

the net; and to insure success, both should well understand their business. When such part of the river is reached as is favourable for the purpose, the Dubb K is thrown to some little distance into the water, and whilst the boat is pulled across the stream, and directly from the Dubb, the net is paid away as fast as possible, and the feeling-stone gradually lowered to the bottom. The hand-line is kept well in hand, and shortened or lengthened according to the depth of water. This in our part of the Gotha was very unequal; for in some of the casts, of which there were upwards of twenty, we had only a fathom or two, whilst in others, on the contrary, as much as six or eight fathoms, or even more. And as the feeling-stone revolves on its axis like a wheel, it keeps pace with the net itself, as, impelled by the current, it sweeps along the bottom of the river. By directing the movements of the boat, in accordance with the Dubb, which, from being blacked by fire or paint, is perceptible on the water, even in the darkest nights, one is always enabled to keep the net in its proper position.

On the instant of the fish coming in contact with the net, the man holding the hand-line sings out *vänd!* or turn; which order his comrade promptly obeys, and bringing the boat's head about in a half-circle down stream, the fish is partially surrounded. In the meantime the fisherman hauls up the net as rapidly as possible, and as soon as the fish comes to the surface, it is either at once lifted on board; or should he be very heavy, and apparently not very securely entangled in the net, the man secures him with an implement called a *Käks*?—Fig. 3—always at hand, which is plunged into the body of the fish.

Unless the water be discoloured, the Dref-Garn cannot be

used to advantage in the day-time. Dark nights are the best for the purpose, as the fish are then unable to perceive it; and when they feel the pressure of its folds, instead of retracing their course they rush bodily into it.

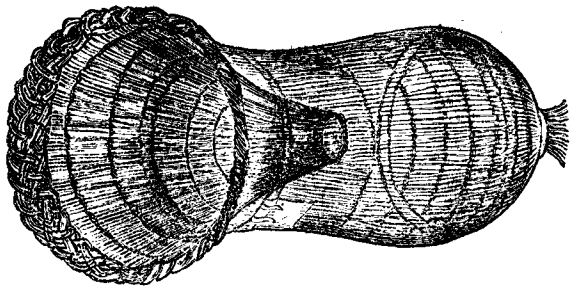
If the current be pretty strong, and the bottom of the river at all even, I know few things of the kind more amusing or exciting than this method of fishing. But if, on the contrary, the current is sluggish, and the bottom foul or ragged, and the net constantly getting fast (the labour of disengaging it being often enormous), it is far from the most agreeable of occupations; more especially should the night be cold and wet, for what with the rain from above and the dripping of the net upon one's clothes, a man's plight, at such times, is anything but enviable.

In my neighbourhood little comparatively was to be done with the Dref-Garn. We now and then, it is true, killed six or seven huge trout of a night; but this was the exception, not the rule, for two or three was considered fair work, and on the average we certainly did not much exceed that number. At Lilla Edet, however, distant about twenty miles from Ronnum, salmon are captured in great quantities by its means.

Though the water in some places was favourable enough for the Casting-net, which with us in England is in such common use, strange to say, with the exception of my own, I never saw or heard of it in Sweden.

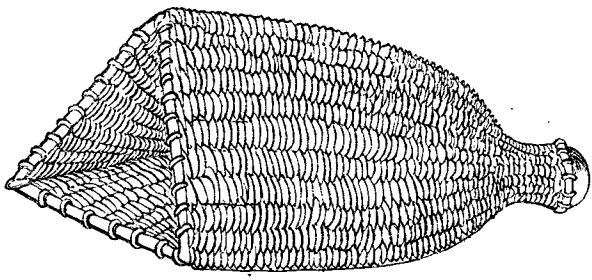
Contrivances called *Mjärdar*—some of them nets in their way—are also in general use throughout Sweden. These devices are of very ancient origin, mention being made of them in the "Upland Laws," which date back eight to nine hundred years.

Of the Mjärdar there are several kinds—namely:



THE VIDE-MJÄRDE.

As the name implies, this Mjärde is formed of osiers. To detail the way in which it is put together would be not only tedious, but perhaps needless, the above drawing explaining everything. Suffice it therefore to say, that it is circular in form, and from three and a half to four feet in length, and that the diameter of the *Ingång*, or entrance, is about fifteen inches.



THE ÅL-KUPA.

As the name would denote, this contrivance is principally

intended to capture eels. It is, however, a less common kind of Mjarde, and the use of it for the most part confined to the Skärgård.

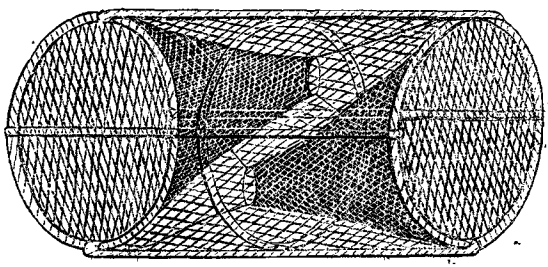
The *Ål-Kupa* is in general formed of osiers, though at times of slips of the Scotch fir. Its construction is in degree the same as that of the Vide-Mjärde; but it differs from it in shape, as well from being triangular (that one surface may lie close to the bottom), as that at the lesser end, there is a small aperture, whereby to abstract the captured fish, which opening, when the Kupa is brought into use, is stopped up with a plug. It is besides somewhat larger, being frequently upwards of four feet in length, and so capacious that either side of the triangle in front measures about eighteen inches. The Ingång is also much longer than in the Vide-Mjärde.

The Ål-Kupa should be very closely and securely bound together, for the reason that if there be a sufficient opening for the eel to insert his tail, he generally manages to worm himself out; it has, therefore, the appearance of a plaited basket.

In some instances the Ål-Kupa is provided with arms or wings, composed of netting, which are of some little length and of an equal height with itself; these are placed either at right angles, or obliquely forward, the better to lead the fish into the toils.

Then again there is the *Garn-Mjärde*, which although used in much the same manner and for similar purposes as the Vide-Mjärde, differs therefrom both in respect to the material—twine—of which it is for the most part composed, as in shape and construction.

There are several kinds of Garn-Mjärdar—namely:

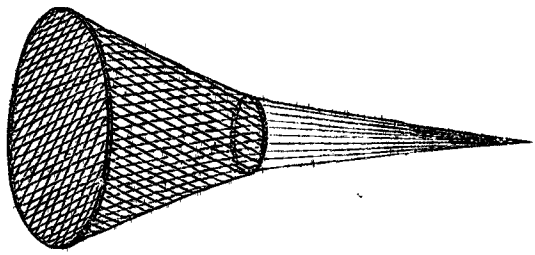


THE CIRCULAR GARN-MJÄRDE.

This, which is the most common of all, is thus constructed. Three stout hoops, of from five to six feet in circumference, connected together by four straight hazel or other sticks—placed transversely—form the *Stomme*, or frame-work; netting of proportionate dimensions is drawn over it, and after being properly stretched, is secured over both sticks and hoops. It has two Ingångar, or entrances, one at each end. But care must be taken that they are of sufficient length to extend some inches beyond each other; for if too short, and placed opposite, and kept in position by thread or fine twine, as is often the case, one may be pretty sure that half of the fish that enter by the one Ingång, will make their exit by the other.

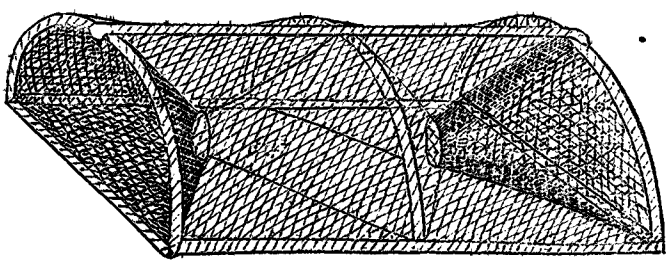
The *Gillring*, or setting of the Ingång, is a matter of much importance. By most people two threads are considered preferable to four. But these should be so placed as to act as a spring, and in consequence afford an easy

passage to the fish when pushing ahead, but fall back again into their position, as soon as the fish has entered the toils.



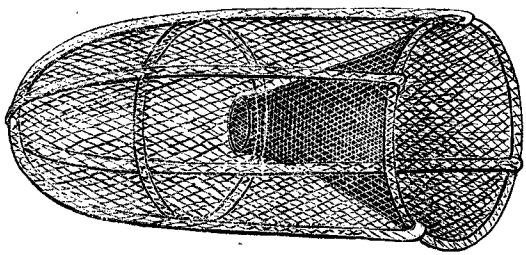
PLAN OF GILLRING.

But perhaps the best plan to gillra the Mjärde, is after attaching several threads to the Ingång, to secure them as depicted above, at one and the same point. These threads, which are kept equally stretched, do not prevent the fish from forcing its way between them whilst entering the Mjärde, but render it next to impossible, when once within, to find the way out again.



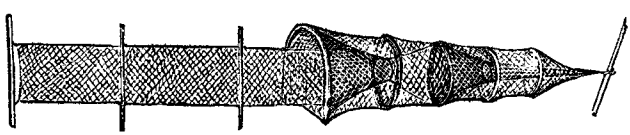
THE FLAT-BOTTOMED GARN-MJÄRDE.

Is so called from the hoops of the frame-work forming only the half of a circle. This Mjärde is constructed in the same way as that last mentioned, and has also two Ingångar, which are gillrade in like manner. It is chiefly used for fish that swim near the bottom, as from the flat side being always placed on the ground, they have greater facility in effecting an entrance.



THE SÄNK-GARN-MJÄRDE.

This Mjärde, as its designation signifies, is always sunk to the bottom by means of stones. Its form is conical, and it has only one Ingång, which is gillrad in the way spoken of. It is less in size than either of the two last named, frequently indeed only two feet, and seldom more than three feet in length.



THE RYSSJA.

The *Ryssja*, also a sort of Mjärde, is thus constructed: The netting is drawn over three to five stout hoops, the

number depending on the intended length of the net. The foremost and largest of the hoops, which, however, only forms the half of a circle, is connected at its ends by a piece of stout twine. The other hoops, which gradually diminish in size, are entire circles. The space between them diminishes by degrees—from the first to the second, for example, it is about three feet; whereas, between the fourth and fifth it is only one foot. The extremity of the Ryssja, called the *Stjert*, or tail, is drawn together by a piece of string, in the manner of a purse.

The Ryssja is provided with two Ingångar, the one within the other, which are nearly alike in form, and are gillrade in like manner as the other Mjärdar.

Arms or wings are generally attached to the Ryssja, the number depending on the locality. At times it has only a single arm, in which case it is placed in a line with the net. At others, more especially when intended to block up the course of a stream, it has two, which diverge at right angles, or rather obliquely forward. Not unfrequently, indeed, the Ryssja has a third arm. The object of this, the central one, which is considerably longer than the others, is, that when the fish follow it to the Ingång, and would turn aside, they fall in with one or other of the side-arms, and are thereby conducted into the net. The length as well as the depth of the arms is proportionate to that of the water. That they may always be on the stretch, they are provided with several Spjälar, or slips of wood, some two feet in length, inserted crosswise between the telnar; and the arms are kept in position either by means of stakes, or by the Spjälar, the ends of which extend several inches beyond the netting, for that special purpose.

When the Ryssja is used, the tail-stake is first passed through its smaller extremity, and being stuck into the ground, the net is then drawn out into its proper form. Care must be taken that it be well stretched, as otherwise the Ingångar have neither their right shape nor their proper position. The line connecting the ends of the foremost hoop, as well as the arms of the Ryssja, must lie closely and evenly at the bottom. But with the arms this is sometimes a matter of difficulty, and the fishermen therefore, instead of stakes or of Spjälar, make use of forked sticks, which answer the double purpose of pinning down the lower telna, and of supporting the upper one.

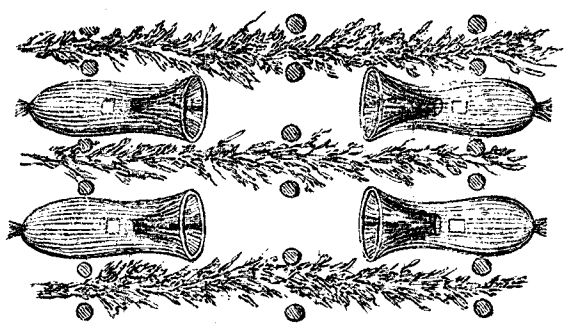
The ground where the Ryssja is set should be tolerably even, and the water of sufficient depth to cover at least one-half of the Ingång. But it must not be too deep, for should it reach to about two-thirds the height of the Ryssja, and should the latter be of considerable length, and not properly stretched, it is very apt to rise from the bottom. Two stakes placed crosswise over it, however, effectually prevent this inconvenience.

When the Ryssja is fixed in running water, the Ingång always lies down stream. In still water it commonly faces the shore. In the latter case, the single arm, or the central one, if there are three (the other two standing obliquely), is made to extend to the very strand. This precaution is quite necessary, for during the spawning season pike approach as near to the land as possible; frequently, indeed, they swim in such shallow water, that although keeping close to the bottom, a part of their body is visible above the surface; and as at the spring season, the water may rise considerably during a single night, the fish, unless this precaution is taken, may

without difficulty find a passage between the end of the arm and the shore.

Should the arm not be of sufficient length to reach the land, a sort of fence, called a *Ris-hage*, formed of *Granris*—that is, the smaller boughs of the spruce-pine—is carried out from the shore; at times, indeed, these Ris-hagar altogether supersede the use of arms.

During the spawning season, fish—pike more especially—frequently resort to overflowed meadows or other extended shallows. As in this case it would be impossible to take them in a single Ryssja, several of these contrivances are united. The inner net is placed all but on dry land, whilst the outer one is nearly under water, and in consequence it is next to impossible for fish to find their way between them.



THE VERKE.

The several kinds of Mjärdar spoken of are chiefly used in the spring of the year, when various species of fish resort, for the purpose of spawning, to shoals, or streamlets tributary to lakes and rivers; and it was as well for the

purpose of intercepting these passages, as for the greater facility of placing out and attending to the Mjärdar, that the *Verke*, which is of very ancient origin, was designed.

It is thus constructed: two long and stout poles—of juniper or ash in preference, as less liable to rot—after being pointed at the lower end, are driven into the bottom at nine to ten inches apart; and in a line with these, though at intervals of about four feet, a second and a third pair. Parallel with this row of poles, but leaving a sufficient space, called *Bås*, for the reception of the Mjärdar, two or more similar rows of poles are formed. Gran-ris is now placed lengthwise between the several pairs of double poles, to the height of about two feet. Afterwards a *Hank** is passed over each pair of poles to keep them in their proper position; then another layer of Gran-ris; and so on until the *Balk*, or wall, has reached above the surface of the water.

The Mjärdar, when placed within the Bås, face inwardly, and as a consequence their respective Ingångar are opposite to each other. They are strung on smooth upright stakes, placed at some little distance within the Bås; and frequently, when the water is pretty deep, three or more are fixed above each other, so that when the first lies at the bottom, the second is in mid-water, and the third near the surface. After this arrangement is made, the Mjärdar are carefully covered over with Gran-ris, for the pur-

* Hank, in the Swedish language, signifies a circular band, whether consisting of a wisp of straw, of a sapling, or what not, the ends of which are interwoven.

pose of keeping the interior of the Verke as dark as possible.

Should the fisherman not possess the requisite number of Mjärdar to fill up the several Bås, he ought at the commencement to place those that he has at different depths: one, for example, at the bottom; a second near to the surface, and so on. By the adoption of this plan he will soon ascertain where most captures are to be made; and this point ascertained, he will place his Mjärdar accordingly.

When the Mjärdar are vittjade, or examined, and the water is so deep that they cannot be reached by the hand, they are brought to the surface by the assistance of a gaff, or hooked-stick.

The device called *Lång-ref* was in much request in my vicinity. As the name denotes, it consists of a long line, to which at stated intervals the *Tafsar*, or snoods, as English fishermen call them (short pieces of string fastened to the hooks), are appended by a slip-knot. Two persons—women as well as men frequently officiating—are required for this kind of fishing, the one to manage the boat, the other the line.

The Lång-ref is of two kinds: one is called the *Botten-ref*, or bottom-line, because of its always lying at the bottom; the other, the *Flott-ref*, or floating-line.

The Botten-ref is in more general use of the two, a greater variety as well as quantity of fish being captured near to the bottom than at the surface. The number of hooks depends in some measure on the extent of the water. Less than from one to two hundred are seldom used, but five to six hundred are much more common; and when two or

three Lång-refvar are joined together, as is often the case, they will extend in a straight or an undulating line, as the case may be, a distance of twelve or fourteen miles!

FIG. 1.

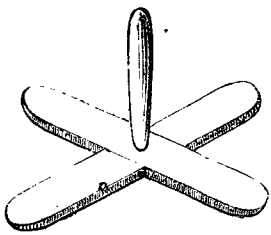
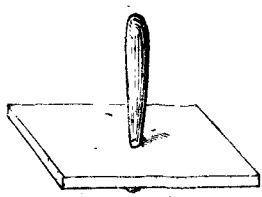


FIG. 2.



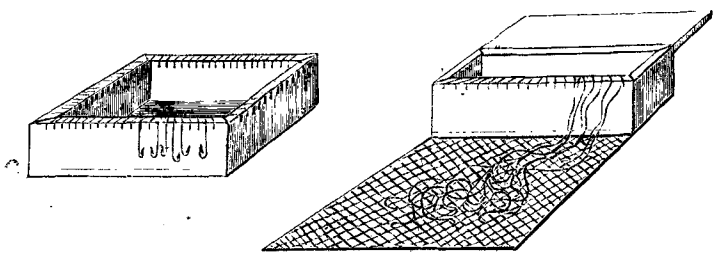
THE VETTE.

If the water be not too deep, an upright stake is placed at either end of the Botten-ref, as well to keep it in its place as to show its whereabouts. But should the depth be too great for stakes, heavy stones are substituted; and the spot is marked by a buoy, called *Vette*, of which the form, as seen in Figs. 1 and 2, varies somewhat.

I have not myself assisted in laying out the Botten-ref, but I have lent a hand in taking one up; and although it was blowing hard at the time, which was much against us, and that some six hundred Tafsar had to be detached from the line, and carefully placed aside in readiness for future use, and the captured fish unhooked, yet the whole operation did not occupy more than from two to three hours. In point of fact, the man, whose office it was to hank in the line, which was placed in coils within a large and open circular basket between his feet, managed fully to keep pace

with the boat, though she was at the time making good way through the water. The address he displayed, indeed, was to myself, who am little conversant with this kind of fishing, a subject of admiration.

FIG. 1. FIG. 2.



THE REF-LÅDA.

Some fishermen, it should be observed, when taking up the Lång-ref, instead of placing the Tafsar in hanks of fifty or one hundred, on the boat's gunwale as usual, stow them away systematically in a *Ref-låda*, as depicted in Fig. 1; and by the adoption of this plan it is next to impossible for them to become entangled. At other times the fisherman, when he wishes to transport the Tafsar, ready baited, to a distance, makes use of a box of a somewhat different construction (Fig. 2).

Laying out the Botten-ref, is even still more quickly performed than taking it up; and adepts have assured me they can readily accomplish this task even when, with a stiff breeze, the boat is under sail and going before the wind. But then, be it remembered, the hooks are previously baited,

so that the Tafsar have only to be attached to the line as it is paid off.

FIG. 1.

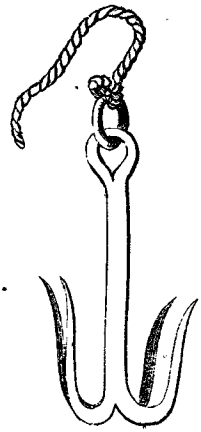
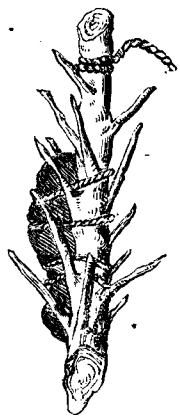


FIG. 2.



THE DRAGG AND THE KRAKA.

As it not unfrequently happens that the Vettar, which mark the position of the Lång-ref, get loose, and are carried away, or that the line separates by fouling, the fisherman, for its recovery, makes use either of a small iron *Dragg* (Fig. 1); or of a *Kraka* (Fig. 2), consisting of the lower portion of a young bushy tree; this being weighted with stones (as seen in the sketch), detains it at the bottom.

The Flott-ref, or floating-line, contrary to the last mentioned, always swims (by means of Flarn placed at fourteen or fifteen fathoms apart), at or very near to the surface; and to prevent its being carried away by vessels sailing over it, or by storms, it is moored to heavy stones, with buoys attached at intervals. It is commonly set over night, or early in the morning, and though seldom taken

up in less than twenty-four hours, it is usual to examine it cursorily more than once in the interim. This is effected by lifting the Flarn with the oar, or what not, in regular succession, when it is quickly ascertained if captures are made.

Though several kinds of fish, more especially pike in the spring, are frequently taken by the Flott-ref, it is chiefly intended—in the Wenern, at least—for huge trout, to which it proves very destructive. A friend of mine, residing on the northern shores of that lake, captured in this way, in less than a day and a half, no fewer than forty-four trout, weighing one with another eight to nine pounds each; and this independently of other kinds of fish, such as pike, perch, ide, asp, &c.

FIG. 1.

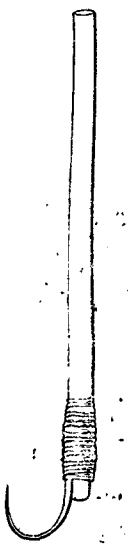
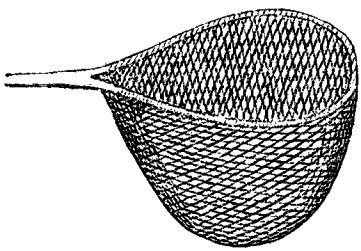
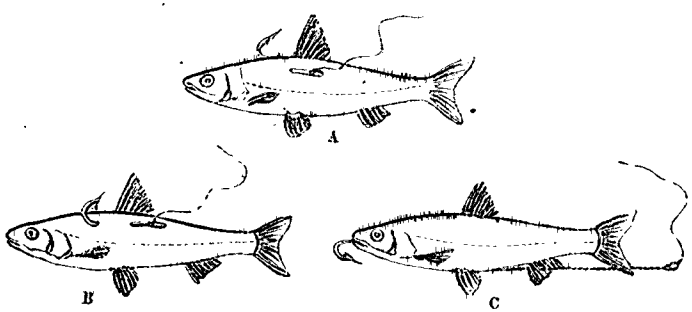


FIG. 2.



THE KLÄPP AND VITTJE-HÅF.

When the fisherman is taking up the Lång-ref, and that the fish on the hooks are too heavy to be lifted out of the water by the line itself, he gets them on board by the aid of the *Klåpp*, or gaff (Fig. 1), or by that of the *Vittje-håf* (Fig. 2), which is neither more nor less than a landing-net.

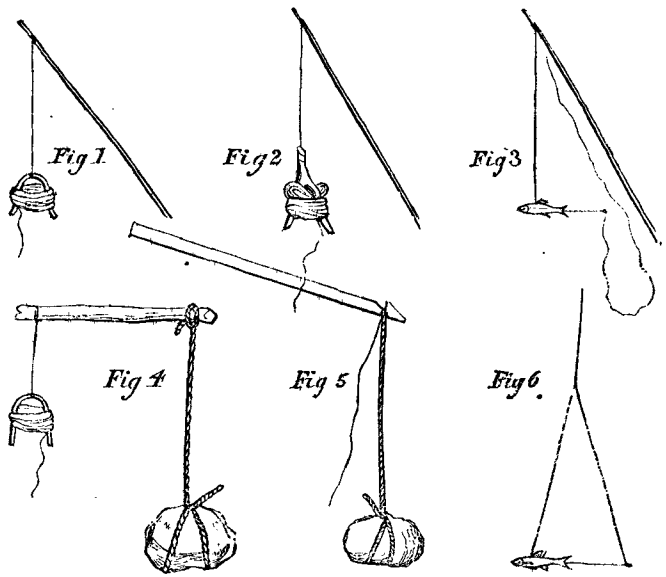


PLAN OF BAITING HOOKS.

The baits used for the Lång-ref are generally small fish, and in preference such as are alive. They are attached to the hook in various ways, which, without particular description, will be readily understood by the accompanying drawings, A, B, C.

Trimmers, or night-lines, were also much used in my vicinity for the capture of pike, &c.; and although differing somewhat in their nature, they were all in principle the same. But trimmers, similar to those we have in England, and which we are accustomed to start adrift in lakes, to be wafted to the opposite shore—"Soldiers," as the late

Colonel Thornton, of sporting celebrity, used to call them—never came under my observation in Sweden.



TRIMMERS.

We had, for instance, the *Ståndkrok*. This consists of a long and supple hazel, or other rod, somewhat stiff at the top. The lower end of this rod being pointed, is fixed in the ground slantingly near reeds, and must be of sufficient length to reach three or four feet above the surface of the water. The line, usually five to six fathoms in length, is attached to a *Båge** (Fig. 1) or to

* A piece of hazel, or other pliant wood, of about the thickness of one's finger, and some eight to nine inches in length, the extremities of which, when green, are bound together with string in the form of a horse-shoe; and this form it retains when thoroughly dried.

a *Klyka* * (Fig. 2), and as it is only very slightly secured by means of a notch, it, at the least tug of the fish, escapes from confinement, and in the manner of a reel, the line runs off with facility.

When the Båge is used, the line is simply wound round its exterior; but with the Klyka the method is different; for after the line has been reeled on the fingers, the hank thus formed is introduced between the fork, where it is secured by a few turns of the line.

In some cases the fisherman does not trouble himself with either Båge or Klyka, but leaves the line altogether at large in the water. That the small fish used as bait may not lie at the bottom, however, where it is less likely to be taken by pike, &c., he inserts a pin in its back, and by means of a thread, suspends it in a horizontal position, as seen in Fig. 3, at some four to five feet below the surface of the water.

The *Klump-krok* (Fig. 4) is only resorted to when the water is too deep, or the bottom too hard, for the Stånd-krok to be used to advantage. As the name implies, it consists of a bar of wood three to four feet in length, on either end of which a notch is cut. To one of these notches the line itself is fastened, and to the other the line of the mooring-stone. Both Båge and Klyka are used indifferently with this device, but the Båge is considered preferable, because should it come on to blow, the line, owing to the undulating motion of the water, is apt to fall from between the forks of the Klyka.

The *Pål-krok* (Fig. 5) consists also of a piece of

* The forked branch of the juniper or other trees, of the like substance as the Båge, and some three to four inches in length.

wood as thick as the thicker end of a stout stake, three or four feet in length. But there is this material difference between this device and the last mentioned, that whereas the Klump-krok always lies horizontally on the water, one-third of the Pål-krok (owing to the line connecting it with the mooring-stone being shortened) stands at an angle of about forty-five degrees above the surface; as also that the mooring-line and the fishing-line are both fastened to one and the same end of the stake. The bait—in preference a living one—and likewise the line, which is of considerable length, is cast to some distance from the spot, and allowed to sink to the bottom.

Living baits are considered almost indispensable for trimmers; but when these are not procurable, and that dead baits are had recourse to, the fishermen, to keep them in a horizontal position, suspend them with the aid of a pin and a fine thread from the line above, so that the line, the fish, and the thread (Fig. 6) form a triangle.

CHAPTER XI.

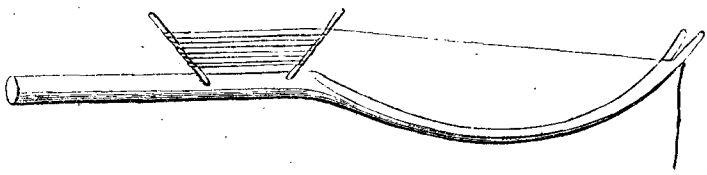
THE SPÖ—MET-TRÄD—SVIFLANDE—SVIFVEL-VIND—LINE, REEL, AND HOOK—SLANT-KROK — SLANT-SPÖ — SPRING-KROK — DRAG — LEKARE — LJUSTER — ELDSTÖDJNING—BLOSS—SUMP.

THE rod and line were constantly used by almost every peasant in my neighbourhood, and one might say throughout Scandinavia generally.

The *Spö*, or rod, is usually a very primitive affair, consisting either of a slip of red deal duly fashioned, and with a flexible top; or of a long, slender, and tapering young tree—juniper or mountain-ash being preferred, which, from the magical properties these trees are supposed to possess, will, it is imagined, insure success to their owner.

Rods go under various denominations in Sweden, as for instance, the *Flug-spö*, or fly-rod; the *Flott-spö*, or float-rod; the *Sänk-spö*, or that for fishing at the bottom, but without a float; the *Rull-spö*, or reel-rod (but this was not included in the list until subsequent to the introduction

by myself of the art of spinning); and the *Slant-spö*, of which more presently.



THE MET-TRÄD.

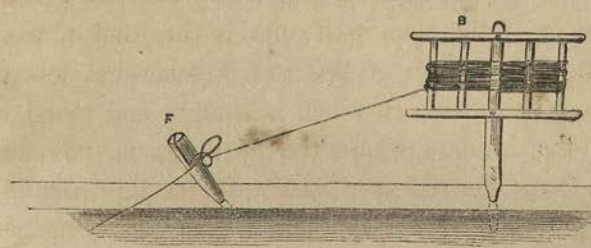
The *Met-träd*, a rod in its way, is also in pretty general use in Sweden, especially in the winter time; and when length of line is matter of necessity, and length of rod indifferent, it answers the purpose intended perfectly well.

Provided it be of proper growth, it is of no consequence whether the Met-träd be formed out of a branch of a tree, or of the stem itself; nor is the kind of tree of moment. The length of this rod is somewhat less than two feet. The after part, which is straight and round, constitutes the handle; whilst the foremost, or bow-shaped portion, forms the rod as it were. In the fore part of the handle, but at a little distance apart, and diverging somewhat from each other, are two pins of three or four inches in length, inserted into holes made for the purpose; and at the extreme end of the bow is a deep *Skåra*, or notch. The line, usually twelve to fifteen fathoms in length, is reeled around the two pins in the handle; or it may be, when time presses, between the aftermost of the pins and the notch. When not in use, the hook attached to the line is secured in

a small aperture near to the notch, or in the upper part of the handle.

FIG. 1.

FIG. 2.



SVIFLANDE.

When spinning for large trout in the waters about Ronnum, we of course always made use of the rod. In parts of the Wenern, however, where people, following my example, have of late years taken to spinning, and by that means annually capture great quantities of trout, they have

discontinued the use of the rod altogether, and adopted a plan of their own, called *Sviflande*—that is, fishing with the swivel, which by all accounts answers admirably.

Their system—which will be readily understood by reference to the accompanying drawing—cannot be adopted except in a boat. If the fisherman be alone, as is often the case, only two *Svifvel-Vindar*—that is, reels in their way, which serve as substitutes for rods—can be brought into use; but if there be two men, the number may be doubled.

Fig. 1 represents the boat, twenty-nine feet in length; A A, the foremost pair of oars, which work on iron pins or rullocks; B B, the two foremost Svifvel-Vindar; C C, the *Giller-spön*, sticks of some four feet in length, inserted at an angle of about forty-five degrees, in the same thwart as the Svifvel-Vindar, and a little beyond them, which serve as well to Gillra the lines, as to keep them outside of those astern; D D, the aftermost pair of oars; E E, the aftermost Svifvel-Vindar; and F F, the *Giller-pinnar*, which, so far as the Gillring of the lines is concerned, do the same duty as the Giller-spön.

Fig. 2 represents the boat's gunwale in profile, showing the Giller-pinne F, together with the manner in which the line is Gillrad in connection with the Svifvel-Vind B.

The line, consisting of twine or horse-hair, seldom exceeds twenty-five to thirty fathoms in length; but unless a fish be hooked, not much more than one-third is ever out at a time. It is leaded according to the season, and the depth of the water: in the height of summer, when fish swim nearer the surface, the lightest; and in the autumn, when on the contrary fish keep more to the deeps, the

heaviest. At all times, however, the several lines are unequally leaded, that the baits may swim at different depths. When a trout or other fish seizes the bait, and the line, released from the Giller-spö, or the Giller-pinne, as the case may be, runs off, the oars are at once dropped, and the boat as a consequence comes to a stand-still; and after the undisturbed lines have been hastily taken in, the captive is hauled on board.

One might suppose that on a fish seizing the bait, he would at once, if unchecked, run to the length of the line, and being then suddenly brought up, would break his hold and make his escape. But this, by all accounts, is very rarely the case; for he seldom goes off with more than six to eight fathoms of the line, when finding himself unmolested, he remains quiet until the fisherman is ready to take him in hand.

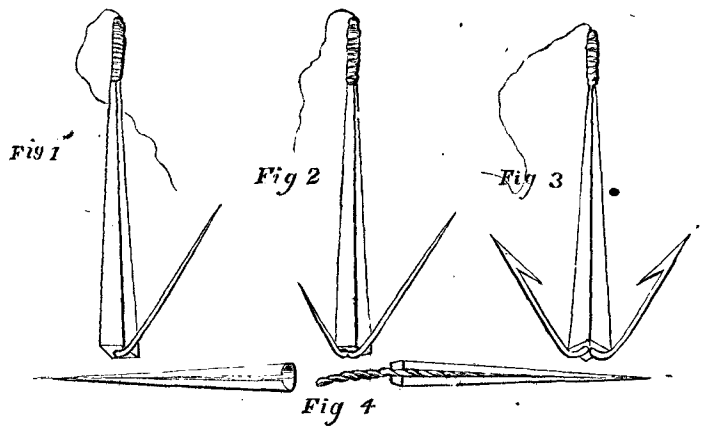
Good sport is occasionally to be had by this method of fishing. A friend assures me that on one particular occasion, he himself in little more than a day killed in this way, independently of other fish, fifteen huge trout, averaging from seven to eight pounds each.

The fishing-line—that intended for the rod, at least—was always made of horse-hair, preference being given to that of a white colour.

The reel, excepting for the purpose of spinning, was seldom used in my vicinity, and as a consequence, when a heavy fish was hooked, however expert the fisherman might be—and many were really adepts in the gentle art—it generally managed to carry away everything.

The common fish-hook was the same as those used in England; many, indeed, were of British, or German

manufacture. But hooks were not unfrequently seen of a very primitive description; not, it is true, formed of stone, as the learned tell us was the case with the ancient Scandinavians, but hammered out of brass or iron-wire. In Lapland, to this day indeed, the fish-hook is occasionally carved out of bone, or out of a forked piece of wood—more especially juniper, preferred as well for its toughness as for the charm it is supposed to bear.



THE SLANT-KROK.

Certain of the Swedish hooks, however, though applicable to the same purpose as in England, differ somewhat in form from ours.

As for instance, the *Slant-krok*, answering to our gorge-hook; and from its body being square instead of circular, it has the consequent advantage of not turning round when introduced into the bait. Of the three kinds of Slant-krok in use in Sweden, as above de-

picted, No. 1 has the preference; No. 2 is the next in favour; and No. 3 the least so. When No. 1 is used, the point of the single hook with which it is armed, is turned towards the head of the bait. If No. 2, the larger of the two hooks, also points to the head, and the smaller to the under jaw. But if No. 3, which is provided with two equally large hooks, they lie one on either side of the mouth. It might be supposed that the Slant-krok provided with most hooks would prove the deadliest; but if the pike has fairly gorged the bait, a single hook is amply sufficient, and less likely to get foul, more especially if, as is the case with No. 3, the hooks are barbed.

The baiting-needle (Fig. 4) is a very simple contrivance. It consists of a needle-like piece of stick, pointed at one end, and with a slit in the other; but I doubt if Crooked Lane can turn out anything more efficacious. The representations show one needle threaded, the other empty.

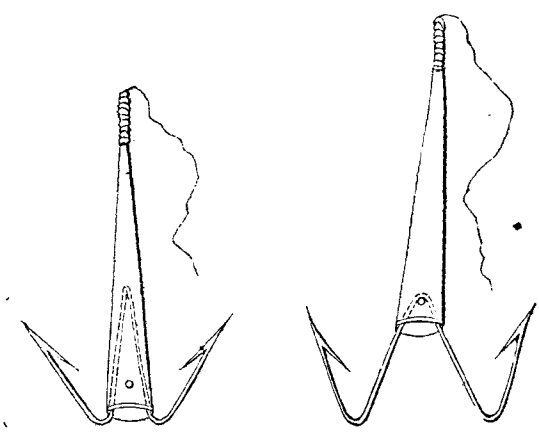
Though intended for the same purpose as the gorge-hook, the Slant-krok is used differently; for instead of trolling the bait—that is, either allowing it to follow in the wake of the boat, or casting it to a distance, and then hanking in the line—it is simply raised and depressed in the water, or in likely-looking holes among the weeds.

This being the case, the Slant-Spö, as the rod used for the purpose is called, is necessarily of considerable length—say twenty to twenty-four feet; but to render it the more manageable, it is formed of the lightest material, and moreover frequently weighted at the butt. The extreme point of the rod is provided with a short pin, over which a small ring, fastened to the line, is suspended at ten to twelve feet from the bait. When, therefore, the pike seizes the bait,

the point of the rod is depressed and drawn backwards, by which the ring slips at once off the pin, and the line, which is placed in coils at the fisherman's feet, is in consequence set at liberty; and after sufficient time has elapsed to enable the pike to gorge the bait (the rod being laid aside altogether), he is hauled in by the line alone, hand-over-hand, as sailors would say.

Two men are needful for this mode of fishing—one to manage the punt, which is always backed, that the fish may not be disturbed; the other, who stands in the stern-sheets, the rod: and if both are adepts, great sport is at times to be had.

FIG. 1. FIG. 2.

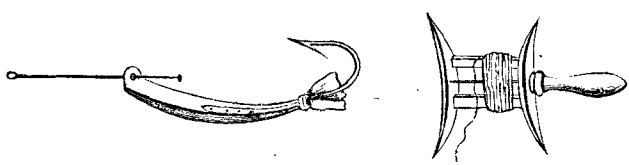


THE SPRING-KROK.

The *Spring-krok*, or snap-hook, as the accompanying figures show, differs in shape but little from ours. It is used in the same manner as the Slant-krok, but it is in much less favour, owing to the hooks, from the least entanglement in the weeds, being so constantly drawn out of their sheath.

Although many pike are taken with the Slant- and the Spring-krok, infinitely more are captured with the common rod and line, the latter being provided with a large cork-float. The bait in this case, always a living one, is affixed to the hook by the fleshy part of the back. In still water the bait must necessarily be in degree stationary; but in rivers the fisherman allows the boat to drop stern foremost down the stream—keeping her the while as near to the reeds, and as distant from the float as he can—the chances being thereby greatly increased of the bait being seen and seized by the pike.

FIG. 1. FIG. 2.



THE DRAG AND THE LEKARE.

The *Drag* (Fig. 1) was also greatly in use in my neighbourhood, more especially for the capture of pike.

This device is a rough imitation of a fish, its usual length being about four inches, and its breadth about an inch. The one side is concave, and the other convex; and it is somewhat curved, that it may spin the better in the water. It is sometimes made of ivory, or even of silver, but much more generally of polished iron or copper. A piece of stout wire, three to four inches long, is inserted through the upper part, or supposed head of the fish, and

therefore answers the double purpose of swivel and gimp. The hook itself is affixed to the lower extremity, or supposed tail; and just above it is a small piece of red cloth, as well for the purpose of partially concealing the hook as of attracting the fish.

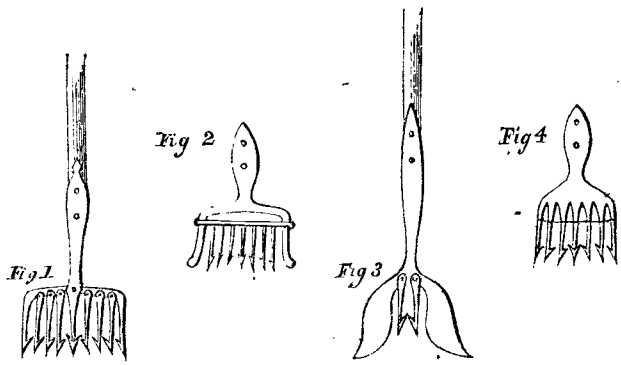
As pike more especially prey on white fish, such as bleak, or dace, a silver-coloured Drag is considered best; but for certain waters, preference is given to imitations made of copper or brass, especially if gilt, as is sometimes the case. There is, however, much fancy in this matter. Some even go so far as to plate one side, and gild the other. But every one agrees in its being needful that the drag should at all times be kept clean and bright.

The line, which is usually of plaited horse-hair, and from twenty to thirty fathoms in length and well leaded at intervals, is wound round a *Lekare*, or reel, as depicted in Fig. 2.

The Drag is always trailed in the wake of a boat. If there are two men, the one holds the line, and the other plies the oars; but should the fisherman be alone, as is generally the case, he usually holds the line between his teeth. When the pike seizes the Drag, it is needful to check it sharply, that the hook may take sure hold; also to keep the fish well in hand, as otherwise the hook is apt to fall out of its mouth. Occasionally two of these devices are used at the same time; but in this case one line should be considerably shorter than the other, in order that should the foremost Drag have the effect of attracting the pike from the strand, the second, by coming across his nose, will present a temptation that he cannot well resist.

Though the Drag is specially intended for pike, other

fish are sometimes captured by it. In one instance, to my knowledge, a salmon weighing nearly forty pounds, was taken with this contrivance.



LJUSTER.

The *Ljuster*, or fish-spear, is thought to be the most ancient fishing device adopted in Scandinavia. The javelin, the arrow, and the harpoon were the weapons used by the Aborigines against the inhabitants of the flood and the field. At the present day, indeed, the savages on the banks of the Orinoco, who for the greater part of the year live on fish, transfix them with shafts. The Ljuster is no other than the harpoon of by-gone days, though in order that its aim might be the more sure, the number of the points was increased to three, this particular number possibly being looked upon as holy, and in consequence lucky. As time advanced, and people from desuetude became less proficient with the javelin, it was needful to improve the devices then in use, as a set-off to want of skill, and the weapon in question obtained

therefore a breadth, that without too great unskilfulness, it must necessarily hit the mark.

Though in principle the same, the form of the Ljuster, as seen in the accompanying sketch, varies considerably. They bear, moreover, the names of the fish for whose destruction they are specially intended. Fig. 1, which is the largest, is called, for instance, the Pike—, or Salmon Ljuster; Figs. 2 and 3, the Eel Ljuster; Fig. 4, the *Simp*—, or *Cottus* Ljuster.

These fish-spears are used both by day and night, but chiefly during the night-time.

Eldstödjning—that is, spearing fish by the aid of fire—was very much practised in my neighbourhood, especially in the spring: the spawning season with various species of fish. This is also a very ancient method of fishing, and which, at the least expense of manual labour and tackle, enables people during the hours of darkness to take such natives of the flood as then approach the shoals.

FIG. 1.

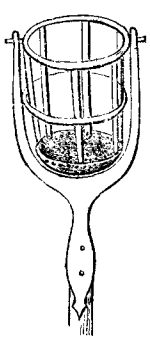
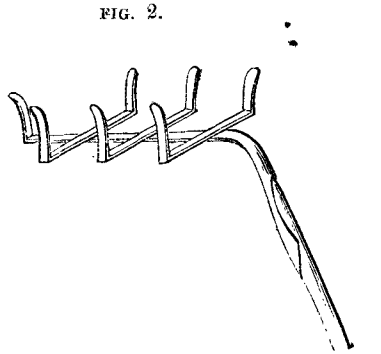


FIG. 2.



THE BRAND-JERN.

The *Bloss*, or torch, used on these occasions, consists of chips of wood, in preference hewn from the dried stump of the Scotch fir, and of such trees as abound with *Kåda*, or resin. These chips are placed in a *Brand-jern*, a sort of cradle, of which there are two kinds, as depicted in Figs. 1 and 2, that, by means of a handle, is affixed to the stern, or to the gunwale of the punt. The handle is usually about three feet in length; but some fishermen, in order that their eyes may not be dazzled by the glare, prefer it of fully their own height.

ELDSTÖDJNING.

The fisherman is generally quite alone, and after kindling the Bloss, and stationing himself in the after part of the punt, he with the shaft of the Ljuster slowly and

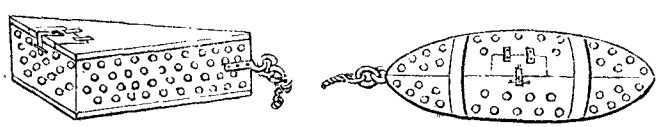
cautiously propels her, stern foremost, along the shore of the lake or river, peering all the while on every side in the surrounding water; and so soon as he espies a fish, and has approached sufficiently near, he reverses his spear, and with deadly aim plunges the weapon into its body.

If there are two men, the occupation of one should be confined to tending the Brand-jern, and seeing that the fire burns clearly and steadily; for when this duty devolves on the spearsman himself, he, after replenishing the fuel, is often so blinded by the light, as to be unable for some time properly to discern objects in the water. The second man is not even allowed to propel the punt, as the spearsman alone can best judge of the direction to be given to it.

From the Bloss being principally used in the spawning season, it proves most destructive in every way to the fish. It is prohibited by law; but this ordinance, in most parts of the country, seems very little attended to.

When the weather was favourable, many parties might be seen thus occupied on the river, near to Ronnum; and if the night was dark, the various bright lights illuminating the water formed a brilliant spectacle.

FIG. 1. FIG. 2.



THE SUMP.

The *Sump*, or fish-box, in use in Sweden varies greatly in its character and form.

There is, for instance, the *Ståud-sump*, which, as the name implies, is always stationary. It is square, and composed of rough boards, nailed transversely to stout uprights at the corners. The lowermost ends of these uprights extend twelve to eighteen inches beyond the Sump itself, and serve as feet for it to rest upon. It is needful thus to raise it from the ground, especially in running water, as the mud and slime would otherwise find its way into the interior, and thus foul the water to the injury of the fish. The top is boarded over, with the exception of an opening for the introduction of a hand-net. Pretty large holes are bored, about six inches apart, as well in the bottom as the sides; and should the Sump be intended for small as well as large fish, as is often the case, these holes are guarded by pieces of stout wire, placed crosswise over them.

The Sump in question is placed between four stout upright posts fixed in the ground, the space between being just sufficient for its reception. It is suspended by hooks and chains, that it may be raised or lowered, as the water rises or falls—a necessary precaution; for should the lid lie beneath the surface, the fish, from the want of atmospheric air, are suffocated. The Sump ought to be placed in running water; for should there be no current, that portion of the water enclosed within it would, from the presence of a multitude of fish, soon become unfit for respiration. If running water is not to be had, the Sump must be placed where the bottom consists of sand or stone. In shallow water, with a grassy, muddy, or clayey bottom, no fish, unless perhaps the Crucian, the Tench, or the Eel, can live.

Another kind common in Sweden is the *Släp-sump*

(Fig. 1), thus designated, because it is often taken in *släp*, or tow. In my neighbourhood, however, it was only used for the preservation of bait. It is generally small and triangular, and its sides and bottom are pierced with numerous holes. At the upper end, or that forming the base of the triangle, is a small opening, closed by a lid, and at the other end a ring, to which is fastened the towing-rope, or the line by which it is anchored.

A second kind of Släp-sump (Fig. 2), whose use is confined pretty much to the coast, is formed of a block of fir or spruce-pine, from four to five feet long, which, after having been properly trimmed and rounded at the ends, is split into two. Both halves are then scooped out in the manner of a dough-trough, and a square hole cut in one side, of sufficient size to admit the hand. Afterwards they are carefully put together again and secured, first with wooden pins, and then with an iron hoop at either end. Pretty large holes are bored in every direction, and across each of these again is a wire, to prevent the escape of smaller fish. Like the Sump last spoken of, it has a ring at one end for the reception of the towing-rope.

Another sort of Sump, used chiefly in the Skärgård, is called the *Segel-Sump*, which consists of a larger or smaller boat. The more common kind are twelve to sixteen feet in the keel. About one-third of the after part of the boat partitioned off, and numerous holes being bored in the sides of the compartment, a well is thus formed. But in the transport of fish, one must be careful, it is said, not to put to sea in stormy weather, even should the wind be favourable; for if the boat's progress through the water be too rapid, the fish die.

Winter fishing, though not so much practised in the vicinity of Ronnum, is greatly followed up in many parts of Sweden, especially in the early part of the frost, when the ice is not of too great thickness, and towards the spring, when the temperature becomes somewhat milder.

FIG. 1.

FIG. 2.

FIG. 3.

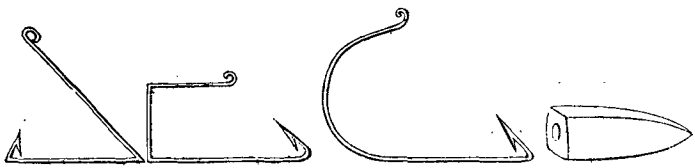
THE IS-BILL AND MET-SKOFLAR.

Besides the fisherman's usual paraphernalia, he, at this inclement season, is provided with additional implements, to enable him to carry on operations advantageously; as for instance, the *Is-bill*, or ice-axe, so to say, (Fig. 1), the lower portion of which is formed of iron, weighing from

seven to eight pounds, with which he makes apertures in the ice; and the *Met-skofvel*, or fishing-shovel (varying somewhat in shape, as seen in Figs. 2 and 3), which is used for the purpose of keeping these apertures clear of ice and snow.

Independently of nets, the fisherman, at this time of the year, resorts to several devices not used in the summer.

FIG. 1. FIG. 2. FIG. 3. FIG. 4.



THE ANGEL-KROK.

Amongst others, to the *Angel-krok*,* so called from its angular form, or properly from its being of the shape of Fig. 1, the most ancient of the three. It is manufactured out of a piece of brass or iron wire, of several inches in length, hammered flat, that it may the better retain its shape. The form is however of no great consequence, provided that the lower portion of the hook, forming the base of the triangle, hangs horizontally in the water.

The Angel-krok, which is more especially intended for pike, and which, from its considerable size indeed, is little

* *Angle* is spelt *Angel* in Swedish.

likely to capture any other fish, is brought into play in the following manner:

A number of circular holes, called *Vakar*, of half-a-foot or so in diameter, are cut in the ice with the Is-bill, near to the edge of reeds, skirting the shores of a lake or river; and immediately alongside each of these again, other small apertures, wherein to affix the *Kil* (Fig. 4). These are small wedge-shaped pieces of wood, in the upper end of which is a hole or socket, to admit of the *Spö*, or rod, consisting of willow, hazel, or other pliant shoot, from two to two and a half feet in length.

The hook is inserted in the fleshy part of the back of the bait—generally a living roach, or the like—and the point brought out near to the back of the head, so that while in the water it retains its natural position, and the barbs of the hooks point backwards. After the depth has been ascertained, it is sunk to about mid-water; the line, which is usually from five to six fathoms in length, is suspended from the top of the rod (which is inclined towards the Vak) by a small loop, or slip-knot, in such manner, that when tugged at by the pike, it at once escapes, and runs off freely. The portion of line remaining, is placed in coils on the ice, by the side of the Vak; or to prevent its freezing, as it is apt to do in severe weather, on a sort of stand.

All being duly arranged, the fisherman stations himself, as near the centre as may be, amid the several ice-holes; and when the pike seizes the bait, of which he is quickly aware by the motion of the rod, he, without much manœuvring, hauls it on to the ice.

Fifteen to twenty Angel-krokar—so say those who are in

the habit of using this device—are fully as many as one man can well manage.

FIG. 1.

FIG. 2.

THE BLANK-KROK.

The *Blank-krok*, or shining-hook—an artificial fish, in short—is another device much used in winter.

The body part is composed of pewter, or pewter and tin mixed. One side is flat and the other round. Sometimes it is armed with two hooks, a larger and a small one (Fig. 1), sometimes with a single hook (Fig. 2). Its dimensions, as well as the size of the hook, vary according to the kind of fish for whose capture it is intended. The hooks are unbarbed. At the upper part of the Blank-krok is a small hole to admit the line, which is secured by a knot; whilst to the lower is attached a small piece of red cloth, as well to represent the tail of a fish, as partially to conceal the hook. And this piece of finery tends greatly, it is said, to lure the fish. I have heard people aver, indeed, that if deprived of the gay appendage, they will hardly look at this device.

Prior to the Blank-krok being used, several circular holes are made in the ice, through which it is lowered to near the bottom; where, by a jerking kind of motion, it is moved up and down, so as to give it as natural an appearance as may be.

The Met-träd is substituted for the rod, and this in the winter is usually the case, whether the bait be real or artificial. When the fish bites, the angler, without touching the line in any way, hanks it, so to say, between the Met-träd, which he holds in his right hand, and the Met-skofvel, which he has in his left, so that in the course of a few seconds the captive is secured. From the hooks being unbarbed, to slacken the line in the least, would in all probability lose the fish. As soon as it is on the ice, a mere shake of the line suffices to disengage the hook, which done, the Blank-krok is forthwith lowered to the bottom again; and it may be that in less than a minute another prisoner is made.

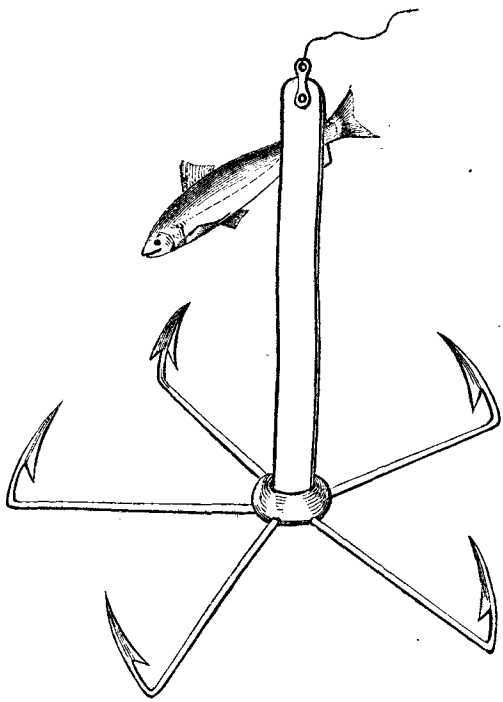
As fish, especially perch, for which the smaller Blank-krok is principally intended, are very stationary in the winter—the fisherman is, at times, obliged to cut many apertures before he discovers the haunt of the fish; but this point once ascertained, he is usually well rewarded for his trouble.

A southerly wind, accompanied with sleet, is, I am told, the best weather in which to bring this and similar devices into use, and if all goes well, great things may be done. A friend assured me, that under favourable circumstances, he has himself, in the course of a few hours, captured by this method from eighty to one hundred pounds weight of perch, pike, &c.

The *Lak-Skifva* is another form of Blank-krok, and, as the name denotes, chiefly intended for the capture of the *Lake*, or Burbot; but it is seldom used, excepting during the

spawning season, which occurs in the depth of winter, and then in the night-time.

Never having seen this device, I cannot accurately describe it; but I understand that the body consists of a piece of bright pewter, or tin, fashioned somewhat in the form of a fish, and that it is armed with sundry hooks.



THE SOT-KROK.

Then again there is the *Sot-krok*,* which, like the last-mentioned contrivance, is chiefly used for the burbot. The

* Pronounced somewhat in that manner, at least.

body part of it, instead of pewter, consists of a piece of unpolished iron, about five inches in length, by one in breadth, and one-eighth of an inch in thickness. The lower extremity of the iron is armed with four or five hooks, which branch out horizontally to a distance of about three inches, whilst at its upper end, which is rounded, and to which the line is attached, is a small feather-spring to retain the bait.

The Sot-krok is introduced into the water through a Vak made for the purpose. The bait consists either of a strip of the immature milt of the burbot, usually enveloped in a piece of fine gauze for its better protection, or of a young smelt, or other bright-coloured fish. If of a strip of milt, it is affixed by one end; and if of a fish, by the tail; and as the Sot-krok, by lifting it up and down in the water, is kept in constant motion, the bait, from being loose, is perpetually swaying to and fro, and thus presents a very attractive lure.

Under favourable circumstances, one's sport with the contrivance in question is at times enormous. The friend just mentioned, informs me that on the 5th of January, 1839, he himself in about an hour and a half—that is, between seven and nine o'clock in the evening—captured one hundred and sixty pounds weight of burbot by this device. And he stated, moreover, that on one occasion, his fisherman was still more successful, having in the course of a long winter's night, taken by the same method no less than three hundred and forty pounds weight of burbot.

It might be supposed that the fisherman would have difficulty in procuring baits in the winter; but this is not always the case, for if the Sump be exhausted, he has only to ground-bait a Vak the one day, which has the effect of collecting the small fish together, and on the following day he may generally take any moderate number with the hook and line.

As this is, however, a less certain resource, many in the autumn preserve in spirits or strong brine the needful supply of baits for the winter: an expedient that answers perfectly well; for these pickled baits prove nearly as killing as if fresh, and what is more remarkable, even when attached to night-lines. A friend, resident near to the Wenern, indeed, actually imported a keg of small salted herrings from the neighbouring coast; and he assures me that he found them succeed just as well as any other bait.

THE MET-SLÄDE.

To conclude. In the winter, and in lieu of the large *Korg*, or basket, containing the needful implements for

carrying on operations, and the captured fish, that the fisherman would otherwise be obliged to bear on his shoulder, he is provided in parts of Sweden with a *Met-släde*, or fishing-sledge, as depicted above.

The body of this box-like vehicle, constructed of thin boards, is about three feet in length, and of breadth proportionate. The fishing tackle, &c., is stowed away within this box; but the Is-bill, being of too great length, is slung as depicted, alongside.

On uneven ground, or where the ice is covered with newly-fallen snow, the fisherman draws the Met-släde by means of a line fastened either to his middle, or placed over his shoulders; but if the ice is *glansk*, or slippery, he seats himself on the vehicle, and with an iron-pointed staff in each hand, impels it forwards, the rapidity of his progress depending on his own address and strength of arm.

CHAPTER XII.

TROLLHÄTTAN — TROLL AND ÄLFVOR — STARKOTTER — SKRÄDDARE-KLINT — SLUICES — IRON-BRIDGE — STALLBACKA — SILFVER-LAX — SVEN'S GALLANTRY — MAGNUS — TROUT FISHING — SALMON FISHING — DANGER — ÅKERSTRÖM — LILLA EDET — ANECDOTE.

To relieve the monotony of always fishing at home, I at times made excursions to Trollhättan, mentioned in my former work, which was about seven or eight miles distant. To say nothing of the chances of sport, the magnificence of the falls and the surrounding scenery, which one could never tire with looking on, were of themselves inducements enough for the trip.

The very name of Trollhättan has, moreover, its own romance; for by the ancient Northmen it was assigned as the abode of the descendants of the Troll and the Älfvor, beings much more wicked than other men.

The traditions connected with Trollhättan are innumerable.

Here, on the Klipp-holmar, champions in heathen

times were wont to decide their quarrels by single combat. The famous Starkotter, renowned over the whole North for his feats in arms, dwelt in the vicinity, and fell in love with the beauteous Ogn Alfafoster. The maiden, however, preferred Hergrimer, and Starkotter therefore challenged him to mortal combat. They fought by the side of the Fall, and Hergrimer was killed; but Ogn rushed forward, seized the bloody sword of her betrothed, and exclaiming: "Though thou hast slain my beloved, thine will I never be!" plunged it into her own breast.

On the western side of the Falls, again, is pointed out the *Skräddare-Klint*—that is, the Tailor's Cliff—or rather the spot where the beetling rock once stood, for in 1755 this mass fell into the raging torrent beneath.

"In a profound cavern near to this cliff," so goes the legend, "dwelt in olden times a band of robbers, who during one of their predatory excursions, made prisoner an unfortunate tailor; but being at the moment in merciful mood, they promised him life on the very singular condition that, whilst sitting on the outermost point of the cliff, and with his feet hanging over the very Fall itself, he should sew a complete suit of clothes. The poor tailor accepted the proffered terms, and so nearly completed the habiliments, that only the *tråckel-tråd*, or basting-thread, with which they were first tacked together, required to be withdrawn. Up to this time he had refrained from looking downwards; but now, and whilst in the act of pulling out the loose stitches, curiosity got the better of his prudence, and casting his eyes on to the surging waters beneath, his brain reeled, and quitting his hold, he was instantly precipitated into the horrible abyss!

"For a long time this retreat of the robbers," says the legend, "remained undiscovered; but at length a maiden, whom they had seized during a foray, and detained in captivity, betrayed them; for one day, during the absence of the band, she purposely lighted a fire at the cave's mouth, the smoke of which having been seen, search was made, the outlaws taken prisoners, and soon afterwards they expiated their crimes on the gallows."

Of late years additional locks, parallel with the old ones, have been constructed at Trollhättan, which afford great facility to the shipping; for vessels can now ascend and descend at one and the same time, which was not practicable formerly. These sluices were constructed under the superintendence of Colonel Ericsson, brother to Captain Ericsson, the inventor of the "Caloric Ship," and redound much to the credit of that able engineer.

For the information of merchants and yachtsmen, I may mention that the new sluices, which are ten in number, are in length, exclusive of the *tröskel* (the platform, it is to be presumed, over which the gates swing), one hundred and ten feet; including the tröskel, one hundred and twenty feet; their breadth, though nominally only nine and a half feet, is ten feet, all Swedish measurement—that is, six per cent less than the English.

A slight cast-iron bridge, solely, however, for the use of foot passengers, now also spans the loftiest of the Falls—by computation about forty feet in height. The outer extremity of the bridge rests on *Topp-Ön*, or the upper islet, situated in the very centre of the boiling torrent; and though when one passes across the apparently fragile structure, the vibration is considerable, it is believed to be perfectly secure.

From the islet in question, which is studded with some half-score pines shooting from the crevices of the rocks, the picture is very beautiful; but to be properly appreciated must be seen; for, as with other of the stupendous works of Nature, the reality defies description.

When the royal family of Sweden visit Trollhättan, as they not unfrequently do, a sort of cock-boat, with the figure of a man in the stern-sheets, is, in honour of the occasion, sent down the Fall. But the effect is rather ludicrous than sublime, which would not be the case if a vessel of any magnitude were precipitated into the abyss beneath.

At Trollhättan there is tolerable fishing both above and below the Falls. As far as the sport is concerned, the best perhaps is above, for there not only trout, but pike, &c., are taken, which is not often the case below.

Near to Stallbacka, about two miles above the Falls, there are some very good rapids, where a dish of trout—more especially in the spring of the year, before the fish are on the move for the Wenern—is almost always obtainable; and owing to the water not being generally deep, one succeeds nearly as well with the fly as by spinning. One day, in the middle of April, I here killed six trout, weighing together about sixty pounds, all, with a single exception, of the species called Silfver-Lax.

Though we occasionally took that beautiful fish in the waters about Ronnum, it was to the rapids in question that he seemed chiefly to confine himself, which circumstance, coupled with the vicinity of these rapids to the Falls, almost inclined me at one time to think that the Silfver-Lax might be a visitor from salt water.

From the Stallbacka Rapids downwards, there is no very

good fishing, the water in general being too deep, not only for fly, but for bait. On one occasion, however, a little above Trollhättan, I killed a trout weighing seventeen pounds.

With the exception of smaller fish in the eddies near to the shore, nothing is to be done immediately above the great falls. It is rather nervous work indeed, fishing here, for the stream resembles a mill-race, and the slightest inadvertence might cause serious consequences. When trying my fortune, I had always a pair of sculls, which rendered the chance of an accident much less likely.

Sven, one of my followers, on these occasions greatly distinguished himself here. A woman, crossing the river in a punt a little above the Falls, let one of the oars slip from out her hand, when the craft being rendered unmanageable, certain destruction stared her in the face. Her shrieks having, however, attracted the attention of Sven, who was standing on the adjoining shore, he, without a moment's hesitation, and at the imminent peril of his life, pushed off in a skiff to her rescue, and was happily in time to save the poor creature from the horrible fate which threatened her.

This fine fellow—who, for his gallant conduct on the occasion in question, received a mark of public approbation—died quietly in his bed at an advanced age.

Not so, however, Magnus, another of my Trollhättan comrades, and a thirsty soul; for one fine night, when descending the river alone from Stallbacka, he managed, as it was believed, to drop asleep, when his boat getting into the force of the current, was quickly carried over the Falls; and though surmised, it was not until his body, mashed to pulp, was found some days afterwards in one of the pools

below, that the fate of the poor man was certainly ascertained.

Though better sport is probably attainable above the Falls, still, from the magnificence of the scenery, the vast and profound pools below were my favourite haunts.

In former times the sport was really superior here, and many a good basket of fish have I made; but of late years it has greatly fallen off. One reason for the diminution of the fish is, that the disciples of Isaak Walton have increased ten-fold; another, that in former times only the fly and the worm were used, whereas, at the present day, every one has taken to spinning, which, from the nature and depth of the water, proves much more destructive to the fish.

As salmon do not make their appearance at Trollhättan until after Midsummer, the only fish to be caught in the early part of the season in the lower pools, are trout. These consist almost exclusively of the Wenerns-Lax, the species so common with us above the Falls. The Silfver-lax was here very rare indeed.

The trout below the Falls were not to be compared in size with those above. I have heard of a sixteen-pounder being speared under the saw-mills; but I myself never killed one of more than twelve pounds in weight, and that was considered an unusually heavy fish. In general, indeed, they are here very much smaller; attributable, probably, to the Falls confining them to situations where they are exposed to constant persecution, and as a consequence no time allowed them to arrive at maturity.

Though in the pools in question the trout are not remarkable for size, salmon are very large there. I myself never

killed one exceeding twenty-five pounds, but I have hooked much heavier fish.

But salmon fishing at Trollhättan, even when the season is at its height, is very poor. One is just as likely, indeed, to return home empty-handed, as to kill even a single fish. This is attributable to the paucity of their numbers, the great depth of their runs, and the almost impossibility of obtaining access to the best casts. And even should one succeed in getting hold of a heavy fish, the nature of the water and the banks of the river are such, that the chances are about equal as to his capture or escape.

One autumnal evening, for instance, I hooked a salmon near to the fishery, in the lowermost pool on the eastern side of the river. As long as he remained in comparatively smooth water, I did pretty much what I pleased with him; but at length, either his own will, or the current, carried him into the roaring torrent below the cataract itself, down which he was hurried at a racing pace. Presently, however, the eddy swept him back into the pool, of which he made nearly the circuit. By this time he had carried off very considerably more than one hundred yards of line; and as the stream now brought him towards me, I was obliged to take the line in by hand, instead of reeling it as usual, that I might retain proper command over him. As the fish, on this his return voyage, swept past the rock, my attendant, who was on the watch with a very long gaff, not only adroitly succeeded in plunging the weapon into his body, but threw him high and dry upon the rocks. Unfortunately, however, these were steep as well as slippery, and before the man could possibly secure the fish —apparently a twenty-pounder—he floundered back into his native element.

TROLLHÄTTAN.

The hook, however, still retained its hold, and the salmon subsequently made two more circuits of the same pool, but never again approached the shore near enough to give us a second chance. Finally, he took up his position under the cascade itself, and within a few paces of where we stood; but my patience being by this time somewhat exhausted, and as night had closed in upon us, I directed my attendant to cast heavy stones into the water, round and about the spot where we supposed the fish to be lying. This at length had the effect of starting him off; but instead of descending the torrent as before, he dashed directly across it, when the line snapped like a piece of thread; indeed a cable, in such a situation, could hardly have held him.

Had success crowned our efforts, trivial evils would not have been regarded; but what with loss of tackle, hands bleeding in several places from the friction of the line, rod so strained as to be irretrievably spoiled, it can readily be imagined that my reflections on the way homewards were anything but agreeable.

When fishing at Trollhättan with a long day before me, it was my custom, after crossing the river above the saw-mills, to follow the several pools downwards, to the still water below. Here I recrossed the river, and facing homewards, tried on the way all the likely pools. Thus I had abundant occupation for a whole day; and by going over so much fresh ground, was pretty sure to make up a basket before night.

Though there may not be much hazard in thus following, in all their meanderings, the broken and jagged banks of the river, yet it cannot be denied, that when a heavy fish is

hooked, and one is necessitated to follow where he leads, be the rocks as steep and slippery as they may, and the pace a sharp one, one risks falling into the torrent, whence extrication is hardly to be hoped.

When on these fishing excursions to Trollhättan, I occasionally borrowed a boat in the still water below the pools, and dropped down the river to Åkerström, a distance of a mile or more, where there is a very fine rapid, as also a sluice to facilitate the passage of ships.

This rapid, in the season, is never without salmon, and those of the largest size—fish of forty to fifty pounds, being by no means uncommon. It is asserted, indeed, that at times they are taken still heavier.

Spinning succeeds tolerably well here; but from the depth and rapidity of the stream, nothing is, I imagine, to be done with the fly. I, at least, could never succeed in raising a fish by that means, and I have tried flies of all sizes and colours.

Though salmon may occasionally be taken below the rapid in question, the only really good place for the rod is in the smooth water immediately above, where with a long and heavily-leaded line, one crosses the stream backwards and forwards in the manner of trolling. When the fish strikes, one should keep directly above him, and endeavour, if possible, to draw him up the river; for though one may with perfect safety follow him down the rapid—in appearance quite sufficiently formidable, by the bye—yet what with the line necessarily slackening during the descent, the chances are equal as to his capture or escape. One should also be careful to have him well in hand, for if there be too much line out, and that he suddenly crosses the stream

to the right or left, the pressure of the current on the curve of the line is such as leads one to suppose he is on the way down the rapid. This happened to me on one occasion; but when I reached the back water below, conceiving all the time the fish was in company, I found, to my mortification, I had left him behind me; and as to ascend the rapid again, excepting by the neighbouring sluice, was an impossibility, the line, as may be supposed, quickly separated.

I have not fished often at Åkerström, and never had much sport, my largest salmon not exceeding twenty-five pounds. But other fishermen have been much more fortunate, as well in respect to numbers, as to the size of the fish. Last summer a peasant took a salmon by spinning, that weighed, it was said, thirty-eight pounds.

Twelve or fourteen miles lower down the Gotha, at the hamlet of Lilla Edet, are other rapids, or rather cascades, where salmon in the season are very plentiful. But owing to the nature of the water, and to the Dref-garn being constantly at work during the day as well as the night, I do not imagine much is to be done either with fly or bait.

Three or four years ago a curious circumstance occurred at Lilla Edet. A man was rowing quietly across the stream, when of a sudden an immense salmon, that had been disporting himself in the air, fell headlong into the boat, where he was quickly secured. The prize was valuable, for the fish—which afterwards found its way to Gothenburg—weighed no less than forty pounds.

CHAPTER XIII.

SALMON AND TROUT FISHING.

SALMON abound in all the Scandinavian rivers, from the extreme south of Sweden to the North Cape; and should a man gain access to streams of note, he may meet with amusement to satiety.

"Sometimes," writes Sir Hyde Parker, "I have had so much sport with salmon, as to occasion indifference whether I fished any more for a week. This I do not hold to be good. To enjoy sport thoroughly, a man should *earn* it, as you do your bears. But at the present day, it is not altogether an easy matter to command a first-rate stream. In Norway"—and he might have included Sweden—"every man is now a fisherman, and many of the waters are hired, so that it is difficult to get a cast to yourself; and I consider the game nearly up, at least for an old one like myself, and not worth going the distance. There are few

flogging rivers, all dragging, which levels all, and skill avails nothing."

From actual experience, however, I myself cannot say much as to the properties of the Scandinavian rivers, in respect to salmon fishing. It is true that on first pitching my tent in the peninsula, I wetted a line in several, as well in Sweden and Norway, as in Lapland. But the season not being sufficiently advanced, my sport was *nil;* and at an after period, having fair fishing at home, it neither suited my pocket nor my convenience to take extended journeys. For the information of the disciples of Isaac Walton, I will, however, jot down the little I know of the northern rivers. And to make the subject the clearer, I will take them in something like regular order, commencing with those on the eastern coast.

Here the rivers are exceedingly numerous, more especially towards the north. One of the most striking features of this part of the country indeed, is the number of streams that, descending from the alpine barrier separating Norway from Sweden, flow into the Gulf of Bothnia. In journeying from Stockholm to Torneå, a distance of from six to seven hundred miles, I counted, if I mistake not, considerably upwards of one hundred; many of them, such as the Dal, the Umeå, the Pitcå, the Calix, the Ljusna, the Torneå, &c., of great magnitude; and some, moreover, navigable to a considerable distance into the interior. This deluge of waters, considering that the country whence they take their rise is of no great extent, always greatly puzzled me.

But though the rivers in question are thus numerous, and in most instances abound with salmon, a notion prevails,

that from some cause or other, the fish frequenting them will take neither fly nor worm.

"As to the Bothnian Gulf side of the country"—such are the words of Mr. C—— (a good authority on fishing matters), in a note to me, dated the 29th of September, 1851—"I was last year one of five rods, who tried many rivers between Stockholm and Torneå; amongst the rest, the Elf-Karleby and the Ljusna—both magnificent rivers, and finer than any I have seen in Norway—but not one of us killed a fish. My brother tried trolling, but with no better success. Large trout and charr took salmon-flies well."

In a subsequent letter, Mr. C—— says: "We met two more Bothnian martyrs—Messrs. Stanley and S——, at Trollhättan. They, like us, did not see a fish. They mentioned another man—H——, of the Scots Greys—who made a failure like the rest of us."

"I have tried most of the rivers in the Gulf of Bothnia," writes Mr. Richard Dann, also a very good authority, "and have killed a few salmon; but as far up the rivers as they could make their way for falls. My belief is that although one may occasionally hook a fish, there is no salmon fishing in these rivers."

Several of my other friends testify to the same effect; amongst the rest, Mr. Oscar Dickson, who has resided for several years near to the Njurunda, one of the most magnificent of the Bothnian rivers, and who has fished the greater part of them.

If the salmon in the Bothnian rivers will not generally take fly—and from what has been stated, such would really seem to be the case—it is a very curious fact, and one well

deserving the attention of the naturalist. The only attempted solution of the mystery that I ever heard is, that the fish in the rivers in question may not be the genuine *Salmo Salar*, but a huge trout, greatly resembling it in appearance.

The salmon in the Bothnian rivers run large. "Those in the Ljusna," writes Mr. C——, "must average some thirty pounds. Many were killed in nets whilst I was there; the smallest of them that I saw, weighed eighteen pounds, and a forty-pounder was a common fish." "More are caught," says Mr. Dann, in corroboration, "above fifteen pounds than under."

The eatable qualities of the Bothnian salmon would appear to be somewhat inferior. "Their flesh is coarse," Mr. Dann goes on to say, "and not nearly so well-flavoured as in the rivers running into the North Sea and Cattegat."

From what has been said, it would appear questionable whether sport be obtainable with the rod in the Bothnian rivers. But should the salmon fisher direct his steps to the opposite side of the peninsula, he cannot fail of finding amusement.

Starting from the Sound, the first river of any magnitude that one meets with is the Ronne, near to the town of Engelholm; but never having heard of any person killing more than a few fish in the stream, I am inclined to believe there is not much to be done there with the fly.

The Laga, flowing past the small town of Laholm, is the next river in succession. It abounds with salmon; and as for some three or four miles from the sea upwards, there are neither weirs nor other obstructions to impede their progress,

and splendid rapids in the intermediate space, a better stream for the rod can hardly be found.

On one occasion I tried my fortune in the Laga, but partly owing to the season not being sufficiently advanced, and partly to want of skill, I returned home empty-handed. I, however, saw two noble salmon captured by the peasants, of whom there must then have been about twenty occupied in fishing.

So beautiful a line as some of these men threw, I had never before witnessed in my life. It was asserted there were individuals who could cast the fly one hundred feet! The distance was at all events very great, and nearly as far again as a Crooked Lane-rod enabled me or my man—who was a very fair fisherman—to cast mine. I must say I never felt so small in my life, as when exhibiting in the presence of these boors.

The rod used by them—which was of extraordinary length, say from twenty to twenty-four feet, and consisted of an aspen pole, topped with a sprig of juniper, or other pliant wood—beat mine hollow in another respect; for being solid, it served the purpose of a staff when wading, as was the practice, owing to the river in places being broad.

At the time of my visit to the Laga, that river was open to every one, and vast numbers of salmon—five to six hundred according to report—were killed there annually with the rod alone. The proprietors of the several fisheries situated on the stream, not admiring this wholesale destruction, protested against the use of the rod; and by a legal enactment it was for several years strictly forbidden to every one, not excepting the owners of the water. But this prohibition was rescinded last autumn, so that the rod is again permitted as before.

The Laga is not a very early river. I was given to understand indeed by Mr. Westberg, who rents a fishery there, that good sport is seldom obtainable until after Midsummer.

We have then the Nissa, a rather large river, flowing past the town of Halmstad. But as salmon weirs span its whole breadth near to the sea, the fish are debarred access to the rapids above; and therefore little or nothing is to be done with the rod.

The Nissa is a rather early river, and the salmon run tolerably large. Numbers are smoked and sent to Gothenburg and other towns, where they are in much request.

The Ätra, at Falkenberg, the next river of consequence, is of great celebrity amongst fishermen, salmon being not only numerous therein, but rising very freely to the fly.

The great drawback in this river is that the rapids are of limited extent, so that unless the fish are on the run from the sea, which during droughts is not always the case, the fishing is soon exhausted.

A young friend and myself, for instance, visited the Ätra some years ago. Between a late breakfast and an early dinner, we caught seventeen salmon, or grilse, weighing together near one hundred pounds; but in the afternoon of the same day, instead of something like doubling that number, as we had anticipated, only a single fish was killed. Indeed, during our stay at Falkenberg, which was not protracted, the sport fell off from day to day.

The Ätra, which is at present rented, is an early river; and fishing is, at times, to be had there even in April, during which month, and that of May, one meets with the

largest fish. Towards autumn, few others besides grilse are to be killed.

The Viska is the next river. But here, as at Halmstad, there are weirs below all the rapids, so that though one may perchance kill a salmon, anything worthy to be called sport is not to be anticipated—so long, at least, as the weirs remain uninjured—for as with other rivers, these are not unfrequently carried away by floods, or are wilfully destroyed, in which case one may meet with good fishing in the upper part of the stream.

The Viska, like the Ätra, is an early river, and the fish are pretty large.

We have then the Save, a stream of no great magnitude, flowing into the Gotha, a mile or two above the town of Gothenburg.

Some years ago there was good fishing in the Save. One day, with the aid of the proprietor of the fishery, who occasionally took a cast with my rod, I killed six salmon, weighing one with another, sixteen to seventeen pounds, beside losing two equally large.

But a weir now crosses the stream below the rapids, so that only a stray fish can pass, and little or nothing is therefore to be done with the rod.

The river (whose name I forget) at Qvistrum, a hamlet situated a few miles to the northward of the town of Uddevalla, is the next in order.

As far as appearances go, this is as nice a stream for fishing as one would wish to see; for within the space of three to four miles from the sea upwards, there are half-a-score or more of fine pools and rapids well calculated for the fly. But nets, unfortunately, are constantly at work, and

one has therefore little chance of much sport. On the two or three occasions of my visiting this river, indeed, I hardly killed a fish.

Crossing the Norwegian frontier, we come to the Glommen, a noble river emptying itself into the Christiania fjord, near to the town of Fredrikstad.

Salmon are, I doubt not, abundant in this river; but as I never heard of any one meeting with much success, I conclude the localities must be unfavourable for fishing. Independently of other considerations, the quantity of timber usually seen floating on the surface, in the earlier part of the season at least—an evil, as concerns the angler, common to many of the northern rivers—must be a great obstacle to sport.

The next river of moment is the Drams, flowing past the well-known town of Drammen, which, like the Glommen, empties itself into the Christiania fjord.

Salmon are plentiful in this river, and numbers are captured at an established fishery near to the hamlet of Högsund, situated at twelve to fifteen miles from the sea, where a somewhat precipitous fall impedes the farther progress of the fish. But as with the Glommen, the localities are not very favourable, and I never heard of much being done there with the rod.

Once when on a journey, I stopped at Högsund for a couple of hours; but though I tried the pools below the falls with moderately good flies, and there was abundance of fish at the time, I had not a single rise. It was, however, somewhat early in the season, and the freshes not altogether run off, which might partly account for my ill success.

We have next the Laugen, at Laurvig, a considerable stream, and, by all accounts, a first-rate one for the rod.

"We made an excursion, some days since, to a fall four Norwegian miles up the river," so wrote Sir Hyde Parker to me under date of the 3rd of August, 1838, "when in three days, Colonel Eyres and myself killed one hundred and eleven fish—some of them thirty-five, and one forty pounds. But the half of them were brown, and must have been of the tribe which passed up in June. Mr. Proby went afterwards, and in one day killed fourteen, and was then stopped by rain, and consequently thick water."

Other friends of mine have also had good sport in this river. "We are now under weigh for Russia," writes Captain Petre to me under date of the 29th of July, "having been staying a fortnight at the falls of the Laugen, and have killed ninety-seven salmon—the eight largest, from nineteen to twenty pounds; the remainder, thirteen, nine, eight, down to four; and we should have killed a good many more, but unfortunately B—— was confined with a bad knee the last six days, and is still completely disabled. I caught the last few days twelve, eleven, and nine salmon a day."

The Laugen is an early river, as regards the lower portion of it at least; for at the rapids spoken of by Sir Hyde Parker, which are at some distance in the interior, the fish do not appear until the season is somewhat advanced.

A considerable portion, if not the whole, of the fishable parts of the Laugen are now, I believe, rented.

The Nid, on which the town of Arendal is situated, is the next river of consequence; but never having heard of any one being very successful here, I doubt its being a good fishing river.

We have then the Torresdal and the Topdal, falling into the sea near to Christiansand, both of which are in repute amongst salmon fishers.

"The Torresdal," writes Mr. Henry Newland under date of November, 1839, "is not much smaller than the Gotha, very bright and very rapid, but not a first-rate river for the fisherman; for from the great falls to the sea it presents one unvarying descent without pools and rapids, a strong and steady stream setting regularly down it. There are three or four flats, where fish rise in from eight, or more, to six feet of water; and near the falls there is a good deal of likely-looking water, and a few roughs. There are few places where you can fish without a boat, but the falls are so perpendicular, that the fish cannot get above them. It is a late river, and contains a good many fish, but they are small. Large flies of dull colour and little tinsel."

"The Topdal is a much smaller river than the Torresdal, dark and still. Fish are to be caught at the mouth, and at the falls three miles up, but nowhere else. This stream does not require a boat, and has but *little* fishing-ground, but there are more fish in it than in the other river. (Silk flies on C C hooks, or even smaller; bright colours). These fish are very poor eating, whereas the Torresdal fish are the best I have met with. It is an earlier river than the Torresdal, and not so much affected by floods; but dry weather injures it much."

The Mandal, which discharges itself into the Cattegat, or rather into the Sleeve, at about thirty miles to the south-west of Christiansand, is also in much repute for the rod. Mr. Newland, when speaking of it, says:

"It is an earlier river, and I suspect better than those at

Christiansand, but we were too late on it. It is larger than the Topdal, and smaller than the Torresdal, and contains five good stations, but they are a good way apart—from the first to the last, five Norwegian miles. The water is slightly tinged. I did not catch enough fish on it to tell to a certainty the flies, but I should say fur bodies, mixed wings, and B or B B hooks. Many parts of this river may be fished without a boat.

There are two more rivers in this vicinity, but they are of little use except during a wet summer.

"Speaking generally of this part of Norway," Mr. Newland farther remarks, "I should not come here again. The fish run small; the largest we caught was under thirteen pounds."

Others of my friends, however, look upon the rivers in question in a much more favourable light. Sir Hyde Parker has, indeed, met with very considerable success in more than one of them.

And I have heard of a countryman, Mr. L——, having done wonders hereabouts. Report says he one forenoon took thirty-five salmon with the fly; and that had he not broken his arm or collar-bone by a fall, he would certainly have landed fifty at the least by the evening. But whether this success was achieved in the Mandal, or in the rivers near to Christiania, I am in ignorance.

Of the rivers hence to Stavanger, I know nothing farther than that Mr. Francis Cholmeley, in a letter dated the 1st of July, 1835, says: "From Mandal to this place the whole country is full of fine streams, abounding with trout, and a good many of them with salmon."

I am also much in the dark as to the rivers on the western

coast of Norway, up at least to the 62° or 63° of latitude. But as I never heard of any one having been very successful hereabouts, I am inclined to believe they are not generally favourable for salmon fishing.

If this is really the fact, may it not be in consequence of their descending, in many instances, directly from glaciers, or from mountains covered with perpetual snow; or that from the land rising so precipitously from the sea, their course is too rapid to afford a fair field for the rod? Such at least appeared to me to be the case with the streams near to Ej-fjord in the Bergen district, which I once visited, though not on a fishing excursion.

Beyond the latitude mentioned, however, the fisherman will meet with rivers that can hardly fail to reward his exertions.

After crossing the Dovre-fjeld, the first of any great note that he meets with is the Gula, which falls into the Drontheim fjord.

This is a considerable river, and in high reputation with salmon fishers. Several of my friends have done much execution there; amongst others, Captain Greene, of the Royal Navy. He favoured me with an account of his performances, but unfortunately the memorandum is lost. Mr. Fosbrooke has also been very successful in the Gula. I am unacquainted with his performances during other seasons, but in that of 1843 he killed, he told me, seventy-nine salmon, the largest of which weighed twenty-eight pounds.

The Gula was formerly an open river, but at present, like many other Norwegian rivers, it is rented, and, as I understand, for a series of years.

We have then the Nid, which also empties itself into the Drontheim fjord.

This fine river is of great celebrity, and much execution has at times been done in it by our countrymen.

"Mr. Overston, the owner of the fishery," says Mr. Charles Royd Smith, "took in our absence eleven good salmon in three hours with the fly, which was great work."

The Honourable Richard Hutchinson, a first-rate fisherman, and amongst the most successful who have visited Scandinavia, also testifies to the abundance of the fish in the Nid. "One day," so he writes, "Mr. Overston and I killed from the same boat either nineteen or twenty fish, nine of which fell to my share. One weighed thirty-eight pounds, a second nearly equalled him, and none of the rest were under twelve pounds. I need not say all these were taken with the fly."

The next river of any consequence is the Steenkjœr, situated at about two days' journey to the north of Drontheim.

Though, owing to the rapids being somewhat limited, and to sunken and floating timber, this river is spoken of rather disparagingly by some, yet there are those of our countrymen who have here enjoyed good sport.

If report speaks truly, Mr. Buckle, in 1847, captured in about a month eighty salmon, averaging fourteen pounds each; and Messrs. Rogers and Hunt, during the same or following year, took no less than two hundred and six fish, in the course of twenty-six days.

I am told that there is a small pool immediately under the Falls at Steenkjœr, where the miller, in 1849, killed

with the fly one hundred and fifty salmon in the course of a month!

Up to a late period the Steenkjœr was an open river, or at least permission to fish was readily obtainable from the proprietor; but it is now said to be rented, and for a term of years.

About one hundred miles beyond the Steenkjœr, is the Namsen, by all accounts about the first river in Scandinavia for salmon fishing, as well in regard to the abundance as to the size of the fish. And as the rapids and roughs, with intermediate pools, extend for miles together, there is, of course, room for several rods.

"The largest salmon I have caught was in the Namsen," says Sir Hyde Parker. "He weighed sixty pounds, being exactly four feet long, and was the largest fish of any kind I ever caught; indeed, I have never seen one caught of greater weight. I caught nine others that day—one of forty, one thirty, one eighteen, one fifteen, the rest from eight pounds downwards."

"We remained on the Namsen about a fortnight," writes Mr. Dann, "and killed ninety-five salmon; but the weather was so bad that several days we were unable to fish. The largest, of which I was the fortunate captor, weighed forty-five pounds. He broke the third joint of my rod at the first dash, and I was an hour and three-quarters in killing him with the remaining joints. Cholmeley caught the second best, weighing thirty-five pounds. Between that weight and twenty-five pounds we killed thirty fish. The first day we caught twelve, Cholmeley and I, Hutchinson not fishing. It really is the best river I have ever seen; such monster salmon are found in no other."

"I never remember having had a blank day on the Namsen," says Mr. Hutchinson. "In this river the salmon run to an enormous size. One of my friends (alluding to Mr. Dann) killed a splendid fish of forty-five pounds. I weighed it myself. I one day rose from forty-seven to fifty salmon, I forget the exact number; of these I hooked nineteen, and killed nine. The largest was thirty-seven pounds, then came one of twenty-seven pounds, and none were under fourteen pounds, with the exception of one of four pounds. Unfortunately, I fished that day with a hook of, I think, very bad shape; but for this, I am confident my day's sport would have been unequalled."

"In reference to our conversation last night," writes Mr. C——, under date the 29th of September, 1851, "I find by my fishing-book, that in 1842 I killed in the Namsen three hundred and twenty-three fish, weighing three thousand eight hundred and forty pounds, and was obliged to leave the water for want of tackle. I was on the river from the 15th of June to the 8th of August. Of the above fish eight were over thirty pounds, and three of the eight above forty pounds. I lost one monster, such as I shall probably never see again."

"Mr. Owen," my friend went on to state in his note, "fished in the Namsen the same year, and killed a great many salmon—one in particular, that weighed a good fifty pounds; but before this point could be ascertained, it was needful to cut the fish in two, and then to weigh the halves separately."

The present Sir Charles Blois has probably been more successful than any one else in the Namsen. In 1843 he killed, as he himself told me, three hundred and sixty-eight

THE NAMSEN.

salmon, weighing together five thousand two hundred and fifty-two pounds, which on the average would be some fifteen pounds each.

Owing to there being but few casts from the banks, the Namsen can only be fished to advantage out of a boat—by trolling as it were, which some consider rather tame work.

People visiting this river must be well equipped. "The Namsen," writes a friend, "requires different flies and tackle to any other river; and any one coming out with English ideas will be woefully disappointed. The salmon will break all ordinary tackle, running out frequently one hundred and fifty yards of line."

The fishing-rights of the whole or the best portions of the Namsen, are now in the hands of our own countrymen.

The accompanying illustration, beautifully representing the Namsen, the boats in use in that part of the country, and the manner of fishing as also the magnificent mountain-scenery in the background, is from the pencil of Mr. Oxendon Hammond, and was executed for his friend Mr. Edward Brettle, through whose kindness it is allowed to appear in this work.

Beyond the Namsen, and between it and the Alten, innumerable rivers empty themselves into the North Sea, all or most of which abound with salmon; and though many have doubtless been visited by yachtsmen and others, I myself am in much ignorance as to their fishing capabilities; with the exception of the Mons and the Malanger, near Tromsöe, which Mr. C——, who was fishing there last summer, describes in glowing colours—as "quite good enough," to quote his own words, "for any one who has

not been spoiled by the Namsen." But the great drawback to these rivers is, that from being situated near to ice-peaked mountains, "they are not fishable," according to that gentleman, "before the 20th of July, and are probably still better in August."

The Alten, situated in latitude 70°, and not far from the North Cape itself, has deservedly gained much celebrity amongst fishermen.

Sir Hyde Parker was, I believe, the first of our countrymen who visited this fine river for the express purpose of salmon fishing; and he was well rewarded for his pains, "having had," he wrote me, "great sport." This was in 1836, if I remember rightly.

Subsequently the Alten has been visited by several of our countrymen, amongst the rest by Mr. Edward Brettle, who met with most extraordinary success. In fifteen days, or parts of days, between the 4th of July and the 12th of August, he captured one hundred and ninety-four salmon, weighing two thousand seven hundred and fifty-two pounds, or on the average some fourteen pounds each. His greatest day was thirty-three fish, weighing together five hundred and eighteen pounds.

In a memorandum of his performances in the Alten, with which Mr. Brettle favoured me, were noted down numbers of salmon of twenty pounds and upwards, five upwards of thirty pounds, and one of forty pounds!

At some sixty to eighty miles, in a direct line, to the eastward of the Alten, though very considerably more if one follows the sinuosities of the coast, is another large river, called the Tana, which, by all accounts, abounds with salmon, and those of a very large size. A friend, indeed, wrote me

recently, that he was going to that river this summer, chiefly because he had heard of a salmon having been captured there of such enormous dimensions, that when cut up it alone filled a barrel!

But though several of our countrymen have visited this river—on which there are three or more established fisheries—during the past few years, I have not heard of their meeting with any extraordinary sport, a circumstance attributable, I believe, to freshes, &c.

The Tana, according to M. Malm, the able Conservator to the Gothenburg Museum, to whom I am indebted for much valuable information, offers a fine field for the angler. It is little likely he would meet with greater obstacles than a few sovereigns would remove; and if not elsewhere, he would be sure to find comfortable quarters at the Parsonage of Utsjoki, situated on one of its tributaries.

Beyond the Tana again, is the Patsjoki, another fine river, that has its source in the great lake Enare, in Russian Lapland; and still farther to the eastward is a smaller river, called the Peise, both of which disgorge themselves into the Icy Sea.

These rivers—so I am told by M. Malm, who resided for some time in this part of Lapland—abound with salmon; and being, I believe, untried, are well deserving the notice of the adventurous sportsman. But as, independently of the distance, they are within the Russian territories (no great recommendation), few perhaps will think it worth while to take so long a journey.

Trout are also plentiful in almost all the Scandinavian rivers, from Scania to Lapland; but less so probably in the larger rivers than in their tributaries, or in smaller streams.

A man, indeed, cannot well go wrong in the peninsula, for let him fish where he will, he is pretty sure to meet with sport.

On the small river at Qvistrum, recently spoken of, for instance, two friends and myself once killed, in the course of a few hours, upwards of two hundred trout. They were small, it is true, but must have weighed together, nevertheless, between twenty and thirty pounds.

Others have had even better sport in this stream. "From about three in the afternoon until between seven and eight in the evening," writes Mr. Edward W. Foster, "I took six dozen and five trout—a few of them a pound in weight, some three-quarters, and many half-a-pound. This was quite upon a par with some of the best fly-fishing days of Loch Awe in Scotland." And he adds: "I had a long bout of it on Monday over a good deal of the same water, and caught between seven and eight dozen of trout—some few of even better size than those of the preceding evening."

There are hundreds of other rivers throughout Scandinavia that would, no doubt, afford equal or superior sport. Near to the sources of several that fall into the Cattegat, I have heard of great things being done.

But although almost every stream in Scandinavia affords trout, and beyond the 59° or 60° of latitude, grayling also, still, the farther the fisherman proceeds to the north, the more amusement he will meet with. Fish are not only more plentiful in the remote rivers, but from being little persecuted, they are less shy. But little skill, moreover, is required here, for let the fly be black, blue, or yellow, or of the colours of the rainbow, trout, as well as grayling, seem to take it with the like avidity.

"Of grayling and small trout," says Mr. Hutchinson, when speaking of the rivers flowing into the Bothnian Gulf, "there is the greatest abundance. I remember having killed seven dozen and a half in about three hours, under the falls at Lyksele in Lapland. I do not think there are any large trout in this river, at least I never killed nor saw them." . . . . . "On the road from Sundsvall to Norway, I had frequent opportunities of fishing the streams tributary to the large Swedish rivers. There are grayling and trout in all of them, and he must be a bad fisherman who cannot soon fill his basket. I and my two fellow-travellers killed one evening twenty dozen; of course they were small, but we took several of between two and three pounds."

Mr. Richard Dann speaks of trout and grayling, more especially the latter, being most abundant in the northern rivers, and tells me he has often captured seventy to eighty in the course of a few hours.

I myself can bear testimony to the abundance of both trout and grayling in the northern rivers, as well from experience in the upper portion of the Clara, near to the lake Fœmund, as in Lapland.

One day, for instance, when fishing in a tributary of the river Kemi, situated in about the 69° of latitude, I took fifty brace and a half of these fish with the fly. Nearly the whole were of a good size, and their weight together must very considerably have exceeded a hundred pounds. The fish were quite a load, in fact, for my two men, who conveyed them from the boat to our bivouac, which was at some little distance.

The charr, as well as the trout and the grayling, in some places also afford the northern fishermen admirable sport.

The notion commonly entertained in England as to the charr not taking the fly, is altogether erroneous; for no fish rises to it with more avidity.

Mr. Charles Engström, our Consul at Gothenburg, mentioned to me, indeed, that in a small stream connecting two mountain lakes near to Hammerfest, he captured in the course of a forenoon from seven to eight dozen of charr of full herring-size. They seemed not at all particular, he said, as to the kind of fly, but took the one as well as the other. Mr. Engström was accompanied by three friends, all of whom were about as fortunate as himself.

When speaking of his performances on the occasion in question, Mr. Engström mentioned a somewhat singular circumstance—namely, that though numbers of charr were shortly after noon seen disporting themselves on the surface of the water, the fish all at once ceased rising to the fly; and during the remainder of the day the party did not succeed in killing even a single one. The result was precisely the same on the succeeding day, when he and his friends again fished the same stream—a heavy basket in the morning, but not a fish subsequently.

"In many of the lakes and streams in the higher range of mountains towards Norwegian Finnmark," writes Mr. Dann, "charr are very abundant. The largest I killed weighed between four and five pounds. Above the falls, near to the source of the great Torneå river, I caught enormous quantities; but it was not everywhere they would rise to the fly."

"Of all fish, perhaps," Mr. Dann goes on to say, "a charr in season dressed directly it comes out of the water is the most delicious. Those with the crimson and orange

spots are the best. Many run of pale yellow with orange spots."

In conclusion: a knowledge of the waters, which experience and practice alone can give, is needful to ensure success in the northern rivers; otherwise days are lost in fishing places where no fish are to be found. Early in the season the deep pools below the falls and rapids are the best. As the summer advances, the fish get strength and take to the strongest streams; and as the autumn comes on, the heaviest fish lie just above the largest falls and rapids. It requires some nerve as well as skill to fish in these places. Two men, with a pair of sculls each, are requisite; and great care must be taken not to get drawn too near the falls, as in that case nothing can save one.

CHAPTER XIV.

M. FALK ON THE BEAR—TWO KINDS—COLOUR—LIMITS—FABULOUS STORIES—SAGACITY—HORSES DEFEND THEMSELVES—CURIOUS NOTION—SELF-DESTRUCTION—HIBERNATION—THE TAPP—AFFECTION FOR YOUNG—TAME BEARS—RAPID GROWTH—BEAR LEADER—STEEL-TRAPS—SNARES—THE GALL.

THERE were a few bears in the country about Ronnum—an occasional straggler, indeed, within five to six miles of the house.

"The bear," says M. Falk—and I quote his words, as showing the spirit of the true sportsman—"is a majestic animal. He instils fear and respect as well into mankind as the brute creation. People may say what they please about his rapacity, and the ravages he commits; but I for my part never wish to see him disappear altogether from amongst our beasts of chase. As a hunter, I chime in with the words of King Frederick I. of Sweden, to the famous Schönberg, that 'he should so limit the number of his *Skalls* as not to root him out.'

"Every one who has had much experience in bear-hunting, and who has got over the emotion, the hurried pulsation that the sight of these imposing beasts is sure to produce, will agree with me, that though it is desirable their numbers should be kept within due bounds, the species, even had one the means, ought not to be exterminated.

"All true sportsmen must find enjoyment in a pursuit not altogether free from danger, where courage and address—qualities not equally called forth in the chase of other beasts common to Scandinavia—are specially required.

"If any kind of hunting tends to harden the body, strengthen the mind, and enable us to meet the dangers that may cross our path in life, it is that of the bear; and the man who calmly enters into combat with this king of the forest, will not in all probability tremble at the sight of the enemy's ranks."

But prior to speaking of the chase of the bear, which holds the same rank amongst the Scandinavian beasts of prey, as the elk among deer, it may be desirable to devote a chapter to his natural history, and the methods adopted for his capture, &c., subjects well-nigh exhausted, however, in the "Northern Sports."

When that work was written, it was the opinion of Nilsson and others, that there were two kinds of bears in Scandinavia—namely, the larger kind, *Ursus Arctos major*, Nilss. (*Slag-Björn*, or bear of prey, Sw.), which lives indiscriminately on vegetable or animal substances; and the smaller, *Ursus Arctos minor*, Nilss. (*Myr-Björn*, or ant-bear, Sw.), that subsists entirely upon ants or vegetable matter. It seems to be now pretty generally understood,

however, that only one kind of bear, the *Ursus Arctos*, Linn., exists in the northern peninsula; and that the differences are solely attributable to locality, age, or other causes.

On the same authority it was farther stated, that black bears were now and then found in Scandinavia, not as a species, but that very old bears occasionally attained to that colour. This I apprehend to be incorrect. It is singular, nevertheless, how much bears vary in colour, especially the cubs, and this often in the same litter; amongst which, indeed, it is not unusual to find one of the number brown, a second with a white ring about its neck, whilst the third may perhaps be as grey as a badger.

But whether there be one or two kinds of bear, or whether occasionally black or not, their habits as beasts of chase are the same; and I shall not therefore enter into the discussion, but leave the learned in these matters to settle the points in question amongst themselves.

Formerly, when Scandinavia was more thinly populated than at present, and when the whole face of the country was covered with dense forests, the bear was to be met with everywhere; but at the present day, owing to so much ground having been brought into cultivation, he is nearly altogether confined to the more northern parts of the peninsula—say from about the 58° of north latitude, to the immediate vicinity of the North Cape itself. And though, from the constant attacks of man, and the inroads made in the forests, bears are not so plentiful as formerly, yet within the limits of the vast range of country mentioned, they are still pretty common.

The bear, however, like man, would seem to degenerate in the higher latitudes; for, by all accounts, the Lapland bear

is much inferior in size to the denizen of the Wermeland and Dalecarlian forests.

More fabulous stories probably exist regarding the bear, than any other animal.

Bishop Pontoppidan informs us, for instance, that "the female carries her young but a month; and that, like the dog kind, which also hastes for the birth, she brings forth two or three in number, blind and naked, and small as mice, each in form like a mere lump; which the mother continually licks, till it expands or unfolds itself, according to the proverb: *Lambendo sicut ursa catulos.* Then they say she holds them in her paws to her breast, to warm them, according to the manner of birds, which Ol. Magnus has also observed; but some are of opinion it is to give them suck, as their paps stand pretty high on the fore part of their body."

Even Nilsson tells us, that if a man goes boldly up to an infuriated bear, the beast, for the most part, contents himself with tearing up, with his powerful paws, moss, stubbs, blocks of wood, &c., which he casts around him on every side; and moreover affirms—by implication at least—that there is such commanding power in the human gaze, that if a man looks a bear full in the face, the beast becomes cowed and slinks away. It may be so; but I am much inclined to believe that were the professor to try the experiment, he would soon wish himself safe at home!

It is a common belief in Lapland, and other parts of Scandinavia, that the bear is possessed of the strength of twelve men, and that there is no end to his sagacity.

The trappers in some places, indeed, aver that in spite of their precautions to conceal the gin, they frequently find it not only sprung, but stumps, roots, &c., sticking between

the closed teeth; that at first they supposed this to be the act of mischievous people, but they have now come to the conclusion that the bear himself is the perpetrator of the mischief. Besides, that when the traps are thus sprung, the ground in the vicinity is much torn up by the beast, and the surrounding trees deeply scored by his teeth and claws; whence they infer he clearly understands that the device is directed against himself, and that being highly incensed, he takes the above curious method of revenging himself.

THE BEAR AND THE HORSE.

Another alleged proof of the bear's sagacity is, that when he has seized a horse, and the terrified prey in his agony drags his foe after him, the bear, in order to stop the headlong

speed of the affrighted horse, retains his hold with one paw, while with the other he firmly grasps the first tree they pass (as illustrated in the accompanying sketch); when, owing to the enormous strength of his enemy, the poor horse is at once brought up and at his mercy. It sometimes happens, however, that if the tree or bush grasped is only slightly embedded in the soil, it is torn up by the roots; when, for a second or two at least, the horse, the bear, and the tree may be seen careering together through the forest!

Though in general horses, when attacked by the bear, make no resistance, but trust to their heels for safety, some are found who will stand gallantly on the defensive, and not unfrequently beat off the assailant.

This was the case with a certain mare in Wermeland, which was known to have come off victorious in numerous conflicts. But this animal exhibited extraordinary courage, as well as wonderful sagacity; for instinct telling her that her own soft heels would have but little effect on Bruin's iron carcase, she would not, after passing the winter in the stable, betake herself to the woods in the spring, until duly provided with shoes. But when the blacksmith had performed his part, feeling she was then prepared to meet the enemy on equal terms, she would trot off gaily to the depths of the forest.

I have also read of a mare at Wuollerim, in Jockmock's Lappmark, that was celebrated for thus combating wild beasts. For the mere fun of the thing, indeed, she herself would at times become the assailant. On one occasion she slaughtered three wolves, which were prowling in company on a newly-frozen lake.

Though I have never seen the horse in conflict with the

bear or the wolf, I can well understand that he at times proves a formidable antagonist; for, independently of his heels (which with management may perhaps be avoided), his fore legs are most destructive weapons. About two years ago a horse thus attacked a valuable pointer of mine—a manœuvre possibly learnt in his combats with wolves—in the most savage manner. No dancing-master could have brought his legs into play with more agility; and it was only by a miracle that the poor dog escaped destruction.

In parts of Scandinavia the curious notion prevails, that though bears, if unmolested, generally flee at the sight of man, they will always attack pregnant women, "whose condition," Bishop Pontoppidan tells us, "they know by scent or by instinct; and with all their might will strive to get the fœtus, which to them is a delicious morsel, if it happens to be a male. A certain clergyman, that related this to me, would not believe it himself, till he saw an experiment with a young and tame bear, which he had chained in his yard, and which until then had not been guilty of any mischief; but one time leading a woman with child almost up to him, he began to make an uncommon noise—he roared and tore about him so, that they were obliged to shoot him instantly. A clergyman's wife also, in Sogne-fjord, related to me the danger that her husband found her in, being also big with child. Returning home on a summer's evening, he saw a bear trying, and taking all the pains he could, to break open the door of his wife's bed-chamber, where she was lying in the greatest anguish, hearing the bear roaring and jumping up at the windows, which fortunately were too high from the ground for him. From this, it is to be observed, that if one of those shepherdesses, or *Giate-Tous*,

who remain a whole summer in the country in their *Sæter-hut*, loses her virtue and becomes pregnant, she then endangers her life, as well as that of her child."

Another singular notion also prevalent in parts of Scandinavia is, that when the bear has received his death-wound, he, rather than fall into the hands of his pursuers, will commit self-destruction! If this strange idea was confined to the lower orders, it might hardly deserve even a passing notice; but as there are those of the better classes who entertain the crotchet, and amongst the rest M. Harald Vergeland, I will quote his views on the subject, as his reasoning is somewhat curious.

"That the bear when mortally wounded makes for the *vand*, or lake, and there disappears," says that gentleman, "has long been a general belief among the common people in Norway. But so far as I am aware, no certain evidence of the fact could for a long time be obtained; neither could people explain how the beast had the power to prevent his dead carcase from rising, at least for a shorter time, to the surface, which never happened; and the mystery could not, therefore, be properly cleared up. Recently, however, we have not only had convincing proof that the popular belief is founded in truth; but the manner in which the body has been kept under the water, has been very satisfactorily explained. The discovery took place in this wise:

"Whilst the *Vada*, or drag-net, was being used in a forest-lake, situated between Eidsvold and the neighbouring parish of Uurdal, in the near vicinity of which, from olden times to the present, there have been several places where it has been customary to shoot bears from the *Gäll* (of which presently); a sunken log was drawn up from the bottom, with the skulls

of three, if not four, bears firmly attached to it, the fangs being deeply imbedded in the wood itself.

"It is not for a moment to be thought of, that these skulls could have been fastened to the tree by the hands of man; and it is not therefore beyond the comprehension of human reason to suppose that the beasts, in their death-struggles, had thus attached themselves to the solid body, to prevent falling into the hands of their pursuers. That none of the other bones were found adhering to the skulls can be easily explained, by the influence that water, and other causes, might, in the course of very many years, have had on the ligaments.

"In connection with this subject, and in corroboration of what has been stated, I may farther add, that a man now living, and a good bear-hunter, had the misfortune some years ago, to lose a severely-wounded bear in the above manner, in the lake in question. After the beast was fired at, and as was evident, from several circumstances, had received his death-wound, his bloody track was observed to lie across the black morass, in the immediate vicinity of the vand; and as there was no return track, the only conclusion that could possibly be come to was, that he had thrown himself into the water.

"The circumstance of three to four bears having attached themselves to this particular log, would seem to have arisen from more than mere accident. It is not improbable, if one is permitted to make a surmise, that the several beasts having crept unsuccessfully for some time under the water, in order to get hold of a solid body, had all, by a strange coincidence, found their way to the same tree.

"That bears in the agonies of death," M. Vergeland goes

on to say, "should evade their assailants in the manner mentioned, is not more remarkable than other peculiarities observable with those animals; and to look at the matter in this point of view, it contains no impossibility. We have besides, pretty certain evidence that several other beasts are endowed with the same instinct. Of the fox, we know, that after being mortally wounded, or about to die from other causes, he always attempts to crawl to his den, or to the water, there to terminate his existence. It is also confidently asserted, that the otter when wounded in the water, immediately dives to the bottom, and never comes up again; whereas, on the contrary, when killed outright, he, at least for a short time, floats upon the surface. And the like is the case with some of the duck tribe, especially the *Mergus Merganser*, for so soon as that bird is deadly wounded, it fastens itself to the grass at the bottom. Speaking generally, it is therefore only reasonable to infer that it lies in the nature of all wild animals, when about to expire—whether from violence, or in the common course of nature—to seek, as far as may be, the most retired place, thereby to prevent their bodies from being afterwards discovered; were the case otherwise, they would be met with more frequently than they are—which, in fact, happens very rarely. How often, for instance, has the house-sparrow, that has died from natural causes, been found? Seldom or never!"

That a bear when wounded will frequently, as stated by M. Vergeland, take to the water, and that no track leading therefrom can at times be found, is perfectly true; but do people properly examine the opposite shore? This is very much to be doubted. On one occasion I was myself

puzzled to know what had become of a bear under these circumstances. The case was this:

A *Skall** on a considerable scale took place under my guidance, at some distance from Ronnum. The Håll was posted across a narrow strip of land, between two extensive lakes; and as the breadth of the lakes near to the pass in question was not considerable, boats were placed at intervals on the water, to prevent the quarry from escaping us by swimming. Owing to unforeseen delays, it was all but dark before the Dref reached the spot where the Skall was to terminate, by which time the boat-parties, fancying the hunt at an end, had, contrary to express orders, retired from their several stations. The consequence was, that on our arrival at the margin of the lake, a badly-wounded bear, that had for some time been retreating before us, plunged headlong into the water, and though twelve or fourteen random shots were fired at him in the gloom, he, to our great mortification, effected his escape.

Though on the following morning I narrowly searched the opposite shore of the lake, which was somewhat rocky and hard, no track was to be found of the lost bear; and had I not afterwards waded along the banks of the lake, and

* This word has various significations. In the sense used by me, it implies a number of people acting in concert, and engaged in the chase of wild animals. There are two kinds of Skall—the *Dref-Skall*, and the *Knäpt-Skall*. In the former, the *Håll*, or stationary division, is placed in position at a particular point in the forest; whilst the *Dref*, or driving division, which at the commencement may be at many miles distance, beats the country towards it; or it may be, that where the object is merely to scare wild beasts, or to rouse them from their lairs, there is no Håll at all. The Knäpt-Skall implies, on the contrary, that before a single person is allowed to advance, a line of circumvallation is formed around the part of the forest intended to be hunted.

examined the mud at the bottom, where I at length discerned his footsteps, I also might have come to the conclusion that he was still in the water.

That death should overtake a wounded bear, when he thus plunges into a lake or river, and is making for the opposite shore, and that he should afterwards sink to the bottom, is very possible; and it is certainly within the bounds of credence, though not of probability, that when decomposition subsequently takes place, the carcase may be so entangled amongst roots, &c., at the bottom, that it cannot rise again to the surface; but farther than this my credulity certainly does not extend.

When naturalists and others indulge in idle fancies, the common people, to my knowledge, often take pleasure in gulling them. I doubt not, indeed, that the story palmed on M. Vergeland, as to the skulls of the bears being found attached by the fangs to a log at the bottom of a lake, was a pure and gratuitous invention.

Bears in a state of nature hibernate, as is known; and so will bears when in confinement, if left entirely to themselves. To this fact I can personally testify.

Observing at the setting in of the winter, that two young bears in my possession were losing their appetite, and evincing symptoms of drowsiness, I caused the door of the building in which they were confined to be nailed up, and boards to be affixed to the bars in front, so that they might remain in comparative darkness, and thus left them altogether to themselves. Two or three days afterwards I peeped through a crevice, and found them in a most comfortable nap, in which state they continued for many weeks. During the whole of that time they, to my certain knowledge, eat

nothing whatever; of which fact I was doubly assured, owing to the snow lying thick on the ground the whole winter, which would of course have told tales had any one gone near to them.

Much was said in the "Northern Sports" of the *Tapp*, or plug, found in the winter time at the outer extremity of the bear's *rectum*. This, according to the Scandinavian Chasseurs, is the material cause of his total abstinence at that season from all kinds of food. They assert, that so long as it remains, he never shows the slightest inclination to eat; whereas, if so hard hunted as to void it, his appetite immediately returns, and he becomes as voracious as ever. English naturalists rather laugh at all this, and say that the Tapp is only fæces, but I for my part cannot help believing there is much truth in the story.

Be the Tapp what it may, however, the bear, according to Pallas, who obtained his information from the Russian hunters, has much difficulty in parting with it in the spring. "Its ejection," he says "causes the beast so much pain, that during the process, he embraces a tree, deeply scoring it in the while with his fangs and claws, and absolutely shrieks with agony." And though I have never heard the like story during my wanderings in the Scandinavian forests, I am much inclined to believe in its truth; for in the spring time one frequently sees a solitary tree at no great distance from the lair, recently left by the beast, marked in the way described, a circumstance for which no one could account.

The female bear evinces much affection for her young, and in the summer time, at least, guards them most tenderly. When accompanied by her cubs, she at that season is a rather formidable animal. She then not unfrequently attacks

people, or makes most serious demonstrations of her readiness to do so.

One of my Wermeland comrades named Gråberg, a tall powerful man, was a few years ago thus beset by a she-bear, and though the beast did not actually assault him, her attitude was so threatening, that he durst neither advance nor retreat, and for several hours was kept pinned to the same spot; but he shall tell his own story.

"On the morning of the 12th of May, 1845," so he wrote me, "I was in the forest between Munkforss and the lake Skärgen, for the purpose of shooting hares. One of the dogs began to bay in a sharp quick manner as if at people or cattle. I ran in haste towards the spot, supposing it to be a poacher visiting my *Tjäder-lek* (the spot where the Capercali carry on their amours in the spring), which was situated on the western side of a pretty high eminence thickly covered both with brushwood and timber trees. On reaching the summit of the hill, I heard an extraordinary cry overhead, and on looking up, observed two young bears squatted amongst the upper branches of a lofty spruce-pine, but I was ignorant of the presence of the mother. I had no balls, but immediately fired both barrels loaded with shot, though without bringing them down. I commenced reloading with all possible rapidity, but had only put in the powder, when I saw the old bear rushing towards me at the top of her speed. When, however, she had approached to within about twelve feet of the spot where I stood, she, with her forepaws placed on a great fir log, suddenly halted, and set up an awful roaring. In fear and trembling I continued recharging my gun, during which time she slowly retreated out of view; but three or four minutes afterwards I again observed her as she

was standing quite still in a thick brake at about twenty paces distance. Her left side was towards me, and taking aim behind her shoulder, I forthwith discharged one barrel, on which she uttered a terrible growl, and wheeling about, started off at full gallop up the side of a little hill hard by. I now supposed that I was quit of her altogether, but she quickly returned once more, with the like speed, to the tree in which her young were perched. This she ascended for a little distance, but presently came down again, and backwards, as is customary with those beasts. Subsequently she posted herself at the root of the tree; but I dared not go nearer to her, neither did she venture to pay me any farther visit. Thus, for a long time, we stood gazing at each other. In the interim, in hopes of causing her to move off, I sounded my *Jagt-horn*, or hunting-bugle, with all my might, but without the desired effect; and as she would not stir from the spot, I was therefore at length necessitated to beat a retreat, leaving her and her cubs in possession of the field."

"In the spring of 1832," so we are told by M. Falk, "two young boys fell in with a she-bear, followed by her cubs, near to the lake Knon in the parish of Ekshärad, in Wermeland. She drove the lads upon an *udde*, or promontory, stretching a considerable distance into the lake, and on to a large fragment of rock lying in the water beyond, where she held them besieged, from seven in the morning until noon! All this time she kept pacing to and fro at the extreme point of the headland, making the forest, at intervals, resound with her roarings, which, indeed, were heard more than a mile off; and it was not until twelve o'clock that she retreated. When the boys were assured that

she had taken herself off, they left their place of refuge, and hasted towards a *Säter*, or shealing, in the vicinity. On the way, however, they fell in with one of her cubs, which by some accident had separated from its dam, and being alarmed at their sudden approach, ascended a tree for safety. The youngest of the lads, aged only thirteen years, who was armed with a small rifle, at once fired, and brought the cub to the ground. The skin is now in my possession."

"On the 1st of August, 1829," we farther read, "the peasant Per Ersson, in the parish of Gagnef, in Dalecarlia, set off for the forest to bring home his horse, which was pastured there. But he had not gone more than three miles from the village, when he was met by a she-bear, followed by two cubs. The man was terribly scared, and commenced climbing a tree for safety. But the beast seeing what he was about, rushed to the spot, and before he had ascended more than a few feet, seized him by the foot, which she bit very severely. What with pain and fright, the poor fellow lost all self-command, as well as his hold of the branches, and tumbled headlong to the ground. His rapid descent had the effect of turning the tables, for the bear, in her turn, now took the alarm, and scurried off as fast as her legs would carry her. After a while, having partially recovered himself, the man hobbled away from the spot as well as he could, and before his strength became quite exhausted, succeeded in reaching a neighbouring cottage, whence he was conveyed in a cart to his home; but his wounds, which were very severe, confined him to bed for a long time afterwards."

Though the female bear thus gallantly guards her young in the summer time, she does not seem equally prepared to risk life for their sakes in the winter; though this perhaps

may be accounted for by her faculties being in a degree bewildered by her long nap. It is true, that when roused from her lair in the winter, she appears reluctant to leave her progeny behind her, especially when they are very young. But she very rarely, I suspect, makes an effort to defend them, either whilst in the lair itself, or subsequently when on foot. If when in company with her cubs, she herself be wounded, she will often, like other bears, attack a man, but generally speaking, not otherwise. Out of the many she-bears with cubs that I myself have fallen in with in the winter time, and for the most part when I was alone, or nearly so, they have never, in a single instance, shown fight for the sake of their young.

Bears are not difficult to tame. At different times I have had several in my possession, which were tolerably tractable. If kept in proper order, which a stick, well applied, greatly facilitates, they show much more docility than one would expect from their savage nature. I have seen a well-grown lad bestride one of mine, and the beast go off with him at a gallop. On one occasion I retained two bears, male and female, until the beginning of their fifth year, and even then not unfrequently allowed the beasts to run at large; but only when I was present, as from their size and strength they were somewhat dangerous. If at liberty, their gambols were very amusing, especially in the summer time, when they quickly found their way into the apple and other garden trees, where they feasted with delight on the fruit.

If properly fed, bears in confinement grow much more rapidly than when in a state of nature; such at least has been the experience of myself and others. Hence probably the enormous bulk of the noble brown bear, which was

reared from a cub, now in the Zoological Gardens, Regent's Park, and which I take to be by far the finest example of the species ever seen in this country. With me their food consisted chiefly of oatmeal, with perhaps a dash of milk, but they would eat almost anything; and singularly enough, would greedily devour large quantities of duckweed (*Lemna*). Of fish they were particularly fond, as also of flesh. One winter, indeed, the large bears mentioned, devoured the carcases of not a few horses.

But though tame bears serve chiefly to amuse, it is on record that they at times answer useful purposes.

"One evening," such was the substance of a relation that two or three years ago went the rounds of the Finnish newspapers, and which there is reason to believe was in the main authentic, "a bear leader presented himself at the house of a widow well to do in the world, in the more southern part of Finland, and requested quarters for himself and his *protégé* for the night. His petition was granted, and after both had duly refreshed themselves, the man, as well as the beast, lay down to rest. About midnight, however, the widow was awakened from her slumbers by a strange noise in a distant chamber, which she soon ascertained to proceed from two burglars who had forced an entrance, and who were busily occupied in rifling the place of the more valuable of its contents. She was terribly alarmed, and forthwith ran to the room occupied by the bear leader to solicit counsel and assistance. "That matter can soon be set to rights," replied he, "provided you supply me with a pint of brandy." This request was soon complied with; and as soon as the man was possessed of the liquor, he gave it the bear, who was not altogether unaccustomed to similar strengthening draughts. Shortly

afterwards, when the alcohol had taken effect, his owner introduced the beast into the chamber where the thieves were carrying on their depredations, and with whose persons the bear quickly made very disagreeable acquaintance; for in spite of their cries and lamentations, he so maltreated the fellows with his paws (his jaws being muzzled), that had not his master come to the rescue, their lives would probably have paid the forfeit. As it was, they were so severely handled, that it was with the greatest possible difficulty they were able, by permission of the widow, who thought them already sufficiently punished, to leave the house."

Bears are captured in Scandinavia by means of various devices, chiefly perhaps by the common steel-trap. This is of great size and strength, and the jaws garnished with fearful teeth. The engine is most generally set in the spring, when the beast, half-famished with his long winter-fast, is roaming the forest in search of food. Carrion is then left exposed in his haunts—at times within a stoutly-constructed fence, forming the two sides of a triangle, and roofed over, so that he can only obtain access to it from the third side which is open. A dead horse is the most common lure. After the trap has been well rubbed over with gum, or with sprigs of the spruce-pine, to take away all taint of the hand, it is placed in a cavity in the ground, between the fore and hind legs of the dead carcase; and as near to the belly as may be, that being the part of the body usually attacked in the first instance by wild beasts; afterwards it is covered over with moss, grass, &c., but care must be taken so to disturb the vegetation around the spot, that the whole may have a uniform appearance.

These traps, however, as mentioned in my former work,

are never fastened to the spot; if such be the case, and the bear is caught by the leg, he frequently bites, or tears off the imprisoned limb. The Wermelanders and Dalecarlians—and the like is, I believe, the case in other parts of Scandinavia—fasten the chain, attached to the trap, to a small log, and as this follows the beast in his movements, he is thus prevented from exerting to the utmost his more than Herculean strength. It is said, that to get rid of this log, the bear resorts to numerous expedients; amongst others, he buries it, and then by making a sudden and desperate plunge, endeavours to relieve himself from the incumbrance. Like the fox, the rat, and other animals, he at times leaves one of his paws behind in the trap; but in spite of being thus mutilated, he frequently continues to exist for years and years afterwards.

In Lapland, the bear, as will hereafter be shown, is occasionally taken in snares; but I never heard of this device being adopted in any part of the country where I have sojourned. It is, however, said that a bear was noosed in a singular manner in the parish of Orsa in Dalecarlia, in the year 1828. The story runs thus: "One fine winter's morning a peasant and his daughter started with a horse and sledge for the forest, to fetch home some hay, stacked on a distant morass. On the way, the man bethought himself of an old *Björn-Ide*, or bear's-den, which, as it lay not far from their track, he determined on visiting. Contrary to his expectations, he found it tenanted; and though unarmed, he determined on attempting the capture of the occupant. For this purpose, he hastened back to the sledge, whence he took a strong rope, composed of goat's hair; and forming a noose at the one end, he threw the other over

the bough of a neighbouring tree.* The daughter was directed to hold by this end of the halter, whilst he himself, with a stout stake, roused Bruin; and when the beast rushed forth and got his head in the noose, the girl at once tightened the rope, and with the assistance of her father, who soon came to her aid, the bear was presently suspended high in air and throttled."

THE GÄLL.

Bears, as mentioned in my former work, are in the summer time frequently shot from a *Gäll*. This, as depicted above,

consists of a sort of stand, erected at a height of from twenty to thirty feet from the ground, between two umbrageous pines, growing very near each other. It is formed for the most part of interwoven boughs; and as well for the purpose of screening it from sight, as to prevent one's tumbling out, it is provided in front with a kind of breastwork. At times the Gäll is erected near to the carcase of some animal, conveyed to the forest for that purpose; but most frequently near to the remains of a horse or cow, recently slaughtered by the beast himself, to which, after he has digested his first meal, he is pretty sure to return.

There is something very interesting in being perched on a Gäll, as I myself can testify, having, years ago, passed five consecutive nights alone in one.

To quote my own words, "the gloomy solitude of the forest in the night season; the melancholy hootings of the great horned owl, heard ever and anon in the distance; the slaughtered cow lying in a small glade before me, mangled in a dreadful manner by the fangs of the beast; and to crown the whole, the momentary expectation of the rugged monster making his appearance, tend to keep up the excitement."

CHAPTER XV.

WILD BEASTS VERY DESTRUCTIVE—SKALLS—BAND—MAGICAL EFFECTS OF THE DRUM—THE SKALL—MAN WOUNDED BY THE BEAR—ACCIDENT—TRIUMPHAL RETURN—THE CAROUSE.

THERE were a few bears, as said, in the vicinity of Romnum, but they were almost altogether confined to the forest lying between the lake Wenern, and the North Sea. Wolves were rather numerous; and lynxes by no means uncommon.

The destruction caused by wild beasts was considerable—by the wolf and the lynx in particular; not, however, as respected mankind—for Scandinavian wild beasts, unless attacked, seldom molest people—but amongst domestic animals. In the district of Dalsland alone, which extends from Wenersborg to the confines of Wermeland—which may be about fifty miles in length, by twenty or so in breadth—it appeared by official returns, that one particular year not fewer than one thousand six hundred and three

head of cattle, sheep, &c., had been destroyed by the noxious animals in question. But it must be remembered that this district, from the density of the forest, and the broken nature of the ground, is quite a nursery for vermin of all kinds.

In other parts of Sweden the ravages of wild beasts seem to be equally great. A committee appointed by the Government in 1828, to devise the best system of mitigating or getting rid of the evil, reported—and the number of casualties is probably greatly underrated—that "in the seventeen provinces, whence the returns had been received, there had been destroyed by beasts of prey during the preceding year (1827) four hundred and sixty-five horses and colts, three thousand one hundred and eight horned cattle, nineteen thousand one hundred and four sheep and goats, and two thousand five hundred and four pigs." It was furthermore calculated, that "in the seven remaining provinces, the loss had been one hundred and eighty-nine horses, one thousand two hundred and eighty-one oxen, cows, and heifers, seven thousand eight hundred and sixty-eight sheep and goats, and one thousand and twenty-nine pigs, making a sum total of thirty-five thousand five hundred and forty-eight head; which, estimating a horse, colt, ox, cow, or heifer, at the low value of forty rix-dollars; a sheep or a goat at two rix-dollars; and a pig at five rix-dollars banco, would give a sum total of at least one hundred and eighty-five thousand five hundred and forty-nine rix-dollars banco," or some fifteen thousand pounds of our money—no inconsiderable sum for a poor country like Sweden.

"And this loss," the report goes on to state, "should be looked upon as doubly severe, because it falls on the poorest of the inhabitants; instances, indeed, not being rare, of

families who have lived in respectability and comfort, having in a short time been reduced by this *lands-plåga*—literally land-plague, or scourge—to distress and misery."

In districts subject to be thus ravaged by wild beasts, Skalls are not of infrequent occurrence. To many persons, these great hunts may seem to bear somewhat hard upon the peasantry and others; but until some better plan be adopted to rid the country of destructive animals, Skalls are perhaps a necessary evil. The principle on which they are got up is at all events equitable; for the law only compels individuals who themselves possess cattle, and who of course have an interest in their preservation, to turn out when occasion requires.

In several instances, when Skalls occurred in the province where I resided, they were placed by the authorities under my orders.

This was the case during the autumn of 1836, when we had three or four in Dalsland, the district recently named. The present Marquis of Downshire, then on a visit with me, took part in these hunts; and Jan Finne, of whom honourable mention was made in my former work, was sent for expressly from Wermeland to aid us. The Messrs. Uggla of Svaneholm—by whom, as well as M. Wærn of Baldersnäs, a distinguished member of the Swedish Diet, we were hospitably entertained during their continuance—also lent us their personal assistance on more than one occasion.

Though, owing to the precipitous hills and deep ravines with which Dalsland abounds, the country, in one sense, is unfavourable for Skalls; yet, as a set-off, there are several forest-tracts, partially surrounded by extensive lakes, which offer positions admirably suited to the purpose; for here

comparatively few men suffice to guard the passes by which wild beasts, when pressed, would probably attempt to escape; and the greater portion of the men may, in consequence, be embodied in the driving division, which thus becomes more than usually effective.

At the Skalls in question, as well as others under my guidance, we had a small band, consisting of a drum or two, and the same number of bugles. This band was stationed in the centre of the driving division, which, as chief in command, was my post. The music tended not only to animate us all, but assisted the people in keeping the line, which was occasionally five to six miles or more in length; for knowing the band to be in the centre, the wings accelerated or retarded their movements accordingly.

But the policy of introducing music at these great hunts, was questioned by many—by M. Falk amongst the rest—it being considered as apt to overscare wild beasts, and thus cause them to break through all obstructions.

Right or wrong, however, the drum occasionally did good service. Once, for instance, the bear came suddenly on the drummer, and would probably have made his escape, had not the man had the presence of mind instantly to commence tattooing, on which the beast headed about again, and was off the way he came, as if the fiend was behind him!

Two or three of our Skalls were on a large scale, five to six hundred men taking part in them, and what with the band, our guns, and other weapons, we resembled in degree a warlike array. The weather was fine, and the peasants generally behaved well. With such means and appliances, and embracing, as the hunts did, a wide field, we ought to

have done much execution; but from natural obstacles, and the want of an efficient staff, our success was inconsiderable — for though we killed some wild beasts, they were much fewer in number than we had every right to anticipate.

At one of the Skalls a she-bear, together with two large cubs, broke through the Cordon, and made their escape. As, however, there was then a sprinkling of snow on the ground, it being the month of November, we were fortunately enabled to ring* the beasts; but as on the succeeding day it rained heavily, and the snow nearly disappeared, we could not consequently tell with certainty whether they were within the circle or not.

Under these circumstances it would not have been expedient to call out the people for another Government Skall;

* The act of ascertaining where a bear has taken up his quarters in the winter time. This, to quote my own words, is performed in the following manner: When there is snow upon the ground, and the track of the animal (resembling, in more respects than one, that of a human being) is discovered, a person follows it until there is reason to believe that the bear may have taken up his abode in the vicinity. This is indicated by his proceeding very slowly, and in a crooked direction, or rather by his doubling in the same manner as a hare; for as long as he goes in a straight line he has no intention of lying down. The man now leaves the track, and commences making an extended circle round the suspected part of the forest. Should he succeed in completing this without again meeting with the track, he of course knows to a certainty the bear is within it. But if, on the contrary, he finds the animal has proceeded beyond his intended circle, he commences another; and thus he continues until he succeeds in accomplishing his object. The size of a Ring depends altogether upon circumstances—the season of the year, the state of the snow, the locality, &c.; and in consequence, though some may not exceed a mile or two in circumference, others again are six or eight, or even more. To ring a bear properly requires great experience; and during the operation, if so it may be termed, the greatest silence and caution are necessary.

and as no time was to be lost, it was therefore deemed best to beat up for volunteers.

The following day happening to be Sunday, notification after Divine Service, was given in the usual way from the pulpit, in the several neighbouring churches, that a Skall was to take place on the morrow, and requesting the peasants to aid us in destroying the bears; and as an inducement they were promised not only refreshments when the Chasse was over, but a ball and supper for themselves and families in the evening.

At ten on the following morning, the appointed hour, we proceeded to the rendezvous—a road-side pot-house, nicknamed *Pung-Vrängaren*, implying that purses were here turned inside-out: by no means an inappropriate designation, considering the scenes of gambling and drinking that, according to report, frequently took place beneath its roof.

But on our arrival, we were much disappointed at finding that our alluring promises had only brought together about one hundred and twenty men; and as that number was considered inadequate, it became a question whether the Skall should not be postponed until a future day. As, however, nearly all the people were armed in one way or other, and a considerable portion—say a fifth—with guns, it was at length decided that operations should commence forthwith.

At Skalls it is usual to station the larger portion of the individuals armed with guns at the Håll, that being the point wild beasts commonly make for in the first instance. But having observed that if foiled here, their future efforts are more usually directed towards the Dref, I have always thought it best to distribute the guns pretty equally through-

out the whole line; and this was the arrangement in the present instance.

After the people had been drawn up in two lines, and their hats numbered with chalk in the usual manner, and everything was in readiness, we marched off in silence to the scene of action, which was not far distant.

The Ring was fortunately of rather confined extent; and though our numbers were few, yet as the forest was open in places, and required in consequence the fewer men, we were enabled to encompass it in a pretty effectual manner. The Dref was in this instance entrusted to the management of Jan Finne, whilst I myself, together with several supernumeraries, took post in the centre of the Håll, where there was a dense brake, which required to be specially well guarded. The gentlemen of our party stationed themselves for the most part to the right and left of me.

Every one being at his post, Jan Finne discharged his gun, the signal for the men of his division to advance. We at the Håll were now all attention, and looking out with intense anxiety for the bears, which were momentarily expected to make their appearance. Such was the profound silence where I stood, that a pin might almost have been heard to drop on the ground.

But some little time elapsed before any one was aware of the bears. At length, loud and continued shouting to the left told us they had been seen by some of the party; but no shots were fired, and presently all was still again. On a sudden, however, I perceived the three beasts rushing through the brake directly towards me. They were not more than about forty paces distant; and had I waited a little, as I ought to have done, they doubtless would have approached much

nearer; but instead of so doing, I at once let fly right and left, though, to my shame, with no apparent effect; for wheeling about on the instant, they were off again as if nothing had happened. Those standing near to me did not fire, because, as they said, their view of the animals was too indistinct.

The beasts now dashed along the line to the left, and for a minute or two the firing was heavy; but shortly all was quiet again, from which circumstance we were led to infer that they had either been killed, or had given us the slip altogether.

But in this matter we were mistaken, for several dropping shots immediately opposite, gave us to understand that one or more of the bears were attempting to break through the driving division.

By this time I was reloaded, and on the look-out. My patience was not long put to the test, however, for shortly afterwards I got a glimpse of one of the young bears as he was rapidly approaching our position, and was in the very act of shooting, when a ball from the rifle of a friend near me stretched the animal lifeless on the ground.

No hard firing took place subsequently, but shots were still occasionally heard at various parts of the Ring. Soon again I saw the outline of the large bear as she was crashing through the brake, and had just time to fire one barrel before she was lost to view; but though the ball did not bring her down, yet from the reel she gave, it evidently took effect.

A few seconds afterwards we heard several shots to the right, the direction taken by the beast, and at the same time the people thereabouts shouted lustily as if for aid.

Apprehensive of an accident, and without having had time

to reload, I ran to the spot, and found the uproar to have arisen from the old bear having attacked a peasant named Sven Andersson. Though only armed with a stout stake, this man, aided by two or three others, had gallantly opposed the beast's attempts to break through the Cordon, and though he himself was capsized, and a good deal maltreated, he succeeded in driving the beast back again into the Ring.

Fortunately the poor fellow was but slightly hurt, attributable probably to the bear being herself severely wounded when she charged. Unluckily, however, all his injuries were in the after part of his person, so that many a laugh was subsequently raised at his expense. But Sven stoutly denied that he had bolted, which, indeed, was not likely—for had he run, there is little doubt, from the disabled state of the bear, that he might readily have got out of the way.

Finding that no serious harm was done, and leaving a person in charge of the Håll, I now made the best of my way along the line to Jan Finne, to ascertain how matters stood with his division. From him I learnt the disagreeable intelligence that the remaining young bear, in spite of every effort to turn him, had broken the Cordon, and made his escape; though not unhurt, as was evident from the blood observable on the few patches of snow still remaining on the ground.

This was far from the worst part of the business; for whilst the bear was in the very act of breaking the line, one of the peasants most incautiously fired, when instead of the ball taking effect on the beast's carcase, it lodged in the thigh of one of his companions.

The poor man, however, was apparently not very seriously hurt, and, in spite of the wound, managed, with assistance,

THE TRIUMPHANT RETURN.

to hobble to a neighbouring cottage, whence he was subsequently conveyed home in a cart.*

As a partial set-off to these disasters, I learnt that the old bear had a minute or two before been seen within the Ring, which was joyful news, as from not having heard either shouts or shots for some little time, I greatly feared she might also have escaped us.

To ensure as far as possible her destruction, the circle (with the exception of the people at the centre of the Hâll), was now gradually contracted, until the opposing lines were in as near proximity as prudence would permit. But still the bear did not show herself, which was perhaps well, for had she danced about the Ring, as in the first instance, and there had been much firing, accidents from stray bullets might easily have occurred.

At length, however, a peasant viewed the beast in a thicket, rocking to and fro in a dying state, when pointing her out to Jan Finne, he immediately shot her through the head.

During this little Skall, eighty to ninety shots must have been fired, and the greater portion within the first few minutes. This sharp practice, coupled with the shouts of the people, and the frequent transitory views one or other of us had of the bears, rendered it as animated and interesting an affair of the kind as it has fallen to my lot to witness.

The bears were now borne to a glade in the forest, that the peasants might gratify their curiosity. The mother was large and fat, and the cub seemingly three years old. Afterwards they were slung on poles, supported by several men, and with

* Though invalided for a considerable time afterwards, yet by the skilful treatment of a medical gentleman, who by our desire attended upon him constantly from the evening of the accident, he eventually recovered.

the band playing some exhilarating tune or other, we marched down from the forest to the road, which was hard by.

The country was undulating and picturesque, and the weather fine for the season of the year, so that the scene, beautifully depicted by my friend M. von Dardel, aide-de-camp to His Royal Highness the Crown Prince of Sweden, was very gay and striking.

After reaching the road, and whilst the people were regaling themselves, a few of us started with a brace of good dogs that had previously been in couplings, in search of the wounded bear; but from the want of snow we were quite unable to track him any distance, and after a time, therefore, the search was given up as fruitless, and we made the best of our way home.

In the evening, the promised ball took place. It was given at the expense of Lord Downshire, whose manly person, shown to great advantage at the Skalls from his being armed to the teeth, coupled with his courteous demeanour and liberality towards the peasants, made him a great favourite with them. As is usual in Sweden amongst the lower classes, a kind of waltz was the order of the night. To quote the words of my ancient friend: "there was great guzzling and great rattling of cups and platters." The heels of many spun round in the mazy dance, and the heads of not a few, from the potent effects of *finkel*, as the common brandy of the country—distilled from potatoes—is usually called. Had a stranger heard the men relate their exploits, he would have supposed each had bagged a bear at the least to his own gun! The festivities were kept up to a late hour, or rather early hour. "We won't go home till morning," says the old song; and so said the boors.

CHAPTER XVI.

RECOVERY AND DEATH OF LOST BEARS — DIFFICULTY OF REARING VERY YOUNG CUBS.

But though the wounded bear spoken of in the last chapter, as well as other bears, had for the time escaped us, it was our full purpose to retrieve them if possible.

As, however, nothing could be done with the beasts in the then state of the snow, and as there seemed no immediate prospect of more falling, Lord Downshire, after resting for a day or two at Ronnum, departed for England, taking with him as a *souvenir* several of our hard-earned trophies, and amongst the rest the skin of a bear killed by himself. Jan Finne also left me—his little farm, situated in the depths of the Wermeland forests, requiring his personal superintendence.

But it was not until the commencement of the new year that a particle of snow fell, and then in such small quantities

as only to cover the ground to the depth of a few inches. The day following I proceeded to the hamlet of Rådane, situated at about twenty miles to the north-west of Wenersborg, in search of the lost bears; but though I searched the forest far and wide, with about twenty men, for three days, all our endeavours to get the beasts on foot were unavailing; not a track or other indication of them was to be seen anywhere.

On the fourth day, however, when we were beginning to despair, the dogs fortunately roused a large bear, one of those that had escaped us at the Skalls, as was known by its bed being of recent construction. The beast went off at speed, and chase was immediately given; but from the very difficult nature of the ground we were very soon distanced, and after a short run, farther pursuit was given up for the time. Coupling up the dogs, we set about ringing the beast, which operation was partly accomplished, as the evening closed in, when we returned to our quarters at Rådane.

The following morning, accompanied by an intelligent guide, I started off with the intention of completing the Ring; but some snow having fallen during the night, it was only in places that the track of the bear was visible, and in consequence we were soon at fault. But shortly afterwards a peasant, whom we accidentally met, gave us the agreeable intelligence that an hour before he had seen the fresh track of the beast, which it appeared had been on foot subsequent to the recent snow-storm.

On reaching the spot indicated, we, in the usual manner, set about ringing the bear; but had not been so occupied more than an hour, when on reaching the brow of a some-

what abrupt declivity, I got a glimpse of the beast, who had been disturbed by our too near approach, as he was stealing away amongst the trees in the hollow below. I had just time to take a snap-shot with the one barrel; but as he did not flinch in any way, it was to be inferred the ball went wide of the mark.

Somewhat later in the day, we succeeded in ringing the bear; but considering that from the then state of the snow, there was little chance of killing him with the dogs alone, we thought it best to leave him undisturbed for the present, and to get up a Skall for his destruction.

With this object in view, I at once posted off some ten to twelve miles, to the nearest of the authorities, who, on seeing the credentials with which the Governor of the province, M. Sandelhielm had provided me, at once ordered out upwards of three hundred men for the succeeding day.

But though the Ring was comparatively small, the people sufficiently numerous to encompass it properly, and the arrangements good in every way, the Skall proved a failure; for almost immediately after its commencement, and without a single shot being fired, the beast, which had been alarmed at our proceedings, left his lair, and coming upon the people unexpectedly, dashed through the line and made his escape.

More snow fell during the succeeding night, and knowing the tracks of the bear, which we had been unable to ring on the previous afternoon, would now be in a great measure obliterated, I started with a friend at a pretty early hour on the following morning, for the purpose, if possible, of again rousing him—a needful step, before it would be practicable to encircle him with any certainty.

We had been thus occupied for two or three hours, at times

following his *Spår*, or track, and at others completely at fault. At length, however, and when on the slope of a steep hill, where there was reason to suppose he had harboured, the dogs were distinctly heard to challenge at some distance above us. Leaving my companion, I hastened to the spot, and found, as I had suspected, that they had fallen in with the bear of which we were in search. The beast was lying in a small and deeply-wooded ravine, and its attention so much taken up with the dogs, which were baying around its lair, that it did not observe me until within a few paces, when just as it was about retreating, I put a bullet through its head.

It proved a female; and in the temporary bed she had formed, we found, to our surprise, three cubs, born apparently the previous night. During the chase of the few preceding days, we had thought it singular that when roused, this bear had never gone any considerable distance; but this sudden increase of her family explained the matter.

Aided by a peasant, who happened to be near the spot, we dragged the beast a few paces to the brow of a pretty lofty and abrupt declivity, when, giving her a lift with my foot, she rolled over and over down the slope, on to the frozen surface of the lake beneath. It was injudiciously done, however; for though time and labour were saved, the carcase, viewed as food, must, from its weight and the velocity of its descent, have suffered no little injury.

Later in the day, the old bear was conveyed in a sledge to Rådane; but the cubs I at once took with me to Ronnum, where, by means of a quill, they were nourished with milk, &c.; but though they lived for some days, they at length all pined away and died.

Subsequently, we succeeded in rousing the wounded bear; but as the ground was then only very partially covered with snow, it was thought more advisable to have a Skall, than to attempt his destruction single-handed.

Having ringed the beast, this therefore took place a few days afterwards; but as on that occasion nothing particular occurred, suffice it to say, that everything went well, and that we duly bagged the beast. That it was the same that escaped from us in the early part of the winter was evident; for at the time of his death, a wound, still green, was visible in his neck.

A few days afterwards I proceeded with the dogs to Nättjebacka, a hamlet situated seven to eight miles to the south-west of Rådane, in which vicinity, report said, one or more bears harboured.

Five or six peasants having volunteered to assist in the search, we, on the following day, beat the forest far and wide, though without seeing any indications of the animals. But the succeeding morning fortune befriended us, for we fell in with a large she-bear, which I at once shot through the head. She also had three cubs, but unfortunately only a few days old, at which period they are most difficult to rear; and though they were straightway conveyed home, where every possible care was taken of them, they all, like those captured at Rådane, quickly perished.

Though the Skalls spoken of were, from various causes, far less successful than might have been anticipated, it will be seen that when alone, I had no great cause to complain of bad luck.

These great hunts are all very well in their way; but their results are too uncertain. It often happens, indeed, that the

slightest hitch, even the misconduct of a single individual, may mar the best-arranged plan, and cause a total failure. When a man, on the contrary, takes the field alone, as it were, and is altogether dependent on himself, to say nothing of all his energies being thus brought fairly into play, which goes far to insure success, his plans, such as they are, are pretty sure to be properly carried out. For this reason I have always considered the Chasse of the bear, single-handed, as infinitely preferable to, and far more exciting, than mobbing the beast.

And after all, I am not sure that the single-handed system is not almost as efficacious as Skalls. Under certain circumstances, and at certain seasons of the year, the latter may be very needful; but in the winter time, when for months together the ground is covered with snow, the bear rarely escapes if a man knows what he is about: such, at least, has been my experience; and excepting in a single instance, when the beast gave me the slip, I have always managed to compass his death by one means or another—that is, up to the end of March; for when one gets into April, in which month the bear of himself leaves his winter quarters, the Chasse then becomes somewhat uncertain.

CHAPTER XVII.

THE BEAR AND CHILD — COURAGEOUS CHILDREN — DARING — PRESENCE OF MIND — THE BEAR AND BELL-RINGER — HARD-FOUGHT FIELD.

WE know that the lion and the lamb will ultimately lie down together; but if the following story be true—and from the authentic source whence it comes to us, it can hardly be doubted—the same good fellowship must already exist at times between the bear and little children.

"During the summer time"—such is the substance of a published letter, dated Trysil, in Österdalen, Norway, the 19th of October, 1850—"the peasants hereabouts—as well on the Norwegian as the Swedish frontier—are accustomed to pasture their cattle at *Säterna*, or Shealings, far distant from their homes; and for this purpose a part, and sometimes the whole, of the family often migrate to these temporary habitations. During the past autumn, two full-grown women with four children, of whom the eldest was ten years old, and the youngest about two, from Hågnåsen, in the parish of Serna, were thus domiciled.

"It was the duty of one of the women to tend the cattle in the forest, whilst the other occupied herself with household matters, and in looking after the children. It so happened, however, on the 23rd of last September, that whilst one of the women, as usual, watched the cattle, the other absented herself for a short time on a visit to a neighbour, leaving the children altogether to themselves. She had not been long away, before they perceived two large brown animals, which they took to be cows, on the outside of the fence, bordering the patch of pasture-ground contiguous to the hut. All children are curious, and indifferent to danger; without consideration, therefore, they climbed over the fence, and made up to the creatures. When the animals became aware of the near approach of the children, the larger of the two compelled the smaller to lie down at the foot of a tall pine, and then couched by its side, as if to protect it from harm. Whereupon, the least of the children—that of two years of age—without hesitation, toddled directly up to the animals, and laid itself down likewise, with its head resting on the belly of the larger one, humming at the same time some nursery-song, as if reposing on its mother's lap! The other children remained the while quiet spectators of the scene. When, however, the eldest had reflected a little, and had come to the conclusion that it was not a cow, but a bear—as was the fact—the child was thus toying with, she became sorely affrighted.

"Meanwhile the infant, who could not remain long in the same position, presently rose from its hairy couch, gathered some blue berries growing hard by, and gave them to its bed-fellow, the bear, who immediately eat them out of the babe's hand! The child next plucked a sprig from a

neighbouring bush, and offered it to the beast, which bit it in two, allowing the child to retain the one half!

"The woman who had the care of the children, on returning to the Shealing, saw with her own eyes the bears as they were retreating into the forest; and when informed of the danger to which her charge had been exposed, she was horrified beyond expression."

From the force of example, and from the hardy life they lead, mere children in the northern forests often display a hardihood and presence of mind little to be expected at their tender years.

"Two boys, cousins, one of ten, the other twelve years of age," so we read in a Swedish journal, of the 13th of November, 1851, "were, on the 1st of last October, tending their parents' cows and sheep, on the outskirts of the forest, in the parish of Evje and Robygdelag, in Norway. Towards evening a she-bear, followed by two cubs, suddenly rushed towards the herd. 'The bear is here!' exclaimed the elder of the lads to the younger, who was at some little distance, '*pass opp! pass opp!*'—that is, look out! look out! At this time the beast was in the act of chasing one of the sheep; and though the boy was only provided with a stick, he instantly ran to the rescue, and held up his frail weapon in a menacing way towards the bear. But the odds were too unequal; for on his near approach, she rose on her hind legs, and laid the gallant little fellow prostrate.

"The younger boy, on hearing the cries of the elder, made forthwith to the spot, where he found the bear lying over his cousin, and not only distinctly heard a craunching sort of noise, but saw the fangs of the beast in contact with his head. In that part of the country, even the smallest lad

wears a knife suspended by a belt about the waist. Such was the case with our little hero, who forthwith attempted to draw the weapon; but owing to rain that had fallen in the morning, the wooden handle of the knife stuck fast in the scabbard, and his efforts to disengage it proved unsuccessful. Nothing daunted, however, and armed only with his stick, he went straight up to the bear, and commenced belabouring her hind-quarters. Thus unceremoniously attacked, the beast, uttering a deep growl, sprung to her feet, and strange to say, moved sullenly off, without offering him any kind of molestation.

"As soon as she had left her victim, and whilst making a second dash at the identical sheep previously chased (which, owing to the rest of the flock having run off in an opposite direction, stood stock still, as if bewildered), the little fellow drew his knife—the attempt in this instance having proved successful—and brandishing the shining blade, he with menacing gestures thus addressed the bear: 'Be off with you! make yourself scarce, or you shall see how I will serve you!' A form of words, coupled with a display of bright steel, of which that beast, according to the superstitious notions of the peasantry, is mortally afraid.

"The wounded boy having by this time risen to his feet, presently joined his comrade; and whilst the two little fellows thus battled with the bear, the hunted sheep, benefiting by the opportune diversion in its favour, succeeded in effecting its escape.

"The bears now retreated, when the lads hastened home with the cattle, leaving the beasts no other trophy than the cap of the elder, that they had carried off; and which, riven nearly in pieces, was afterwards found at some distance from the scene of conflict.

"The clothes of the wounded boy were torn to rags, and he himself sorely bitten, as well in both shoulders, as in the thigh near to the hip, where he received a long and deep wound, as also in the head, in which were several holes and gashes; but he is, nevertheless, now so far recovered as to herd cattle as before.

"'What would you have done had the bear carried off your cousin?' was the question put to the younger lad after the occurrence. 'Then I myself should never have returned home,' was his reply; 'we should have shared alike.'"

Instances of great daring on the part of men when in conflict with the bear, are also on record.

"Observing a Laplander with only one eye," said Mr. Dann, "I inquired how he had lost it. I was told in reply he had discovered that a bear had made its winter domicile in the cleft of a rock of some depth, but the entrance to which was so confined, that it was impossible to penetrate into it, excepting by crawling on one's hands and knees. Nothing daunted, however, this brave fellow, pushing his pea-rifle before him, and followed by a comrade bearing a light, crept into the hole, at the extremity of which he perceived the bear. The Lapp took deliberate aim and fired, but only wounded him. The beast instantly rushed forwards; but so small was the hole, that finding he could not pass the man, he began clawing his head and face. Thus beset, the poor fellow, whilst protecting himself as well as he was able with his *pels*,* drew his knife, and with repeated stabs

* A loose coat, or rather a sort of cloak, made of, or lined with furs of any kind. In Lapland it more generally consists of the dressed skins of the young rein-deer.

in the body, at length succeeded in despatching his assailant. He lost, however, one eye in the conflict."

Nor are instances wanting wherein considerable presence of mind has been displayed by individuals, when assaulted by the bear.

During the summer of 1851, so we are told, the bears committed great ravages in the vicinity of Værran, in the bishopric of Drontheim in Norway. In the early part of September, one of these beasts attacked, unawares, a herd of cattle, of which it killed an ox, and maimed several of the cows; and in consequence, *gillrade gevär*—that is, fire-arms arranged in the manner of a spring-gun — were forthwith set in the forest near to the slaughtered animal.

On the following morning six men proceeded to the spot to ascertain the fate of the depredator. Five of the number were armed with guns, but the sixth, a small proprietor, named Peter Vennes, was only provided with an axe. This man, from some cause or other, separated from his companions; and when in a densely thick brake, came suddenly upon the bear, which rushed upon him before he had time to defend himself, otherwise than by thrusting the handle of his axe between the open jaws of his assailant. The bear bit this in two; but the man, who had the presence of mind to seize hold of his distended tongue, managed to keep him at arm's-length until such time as his own strength was exhausted; when the enraged beast, fastening his fangs in one of the poor fellow's hands, lacerated it most cruelly. At length, however, one of the man's companions reached the scene of action, and gave fire, which caused the bear to retreat; though this was not until, in addition to other injuries, he had torn open the thigh of his victim.

But the bear was not yet vanquished. Several other shots were subsequently directed at him, and it was not until the following day that he was found dead, with a bullet lodged in his breast.

The wounded man recovered, but it was thought he would be a cripple ever afterwards.

THE BEAR AND THE BELL-RINGER.

Though the actual loss of life from bears in Scandinavia is inconsiderable, instances of people being mauled by those beasts are of every-day occurrence. The proportion of the

killed to the wounded, is, in fact, very much less than the returns show after a general action. And what is singular, this rule would seem to hold good even with the lord of the desert; for African travellers tell me, that the lion maltreats infinitely more people than he actually slays.

Amongst several of my acquaintance who suffered from the ferocity of bears, was the late M. Ullgren, inspector of the iron-works at Rammen, in Wermeland. He was wounded by a large she-bear, of which I myself, after shooting two of her supposed progeny, had been in search only a week or two previously. But he shall tell his own story.

"The hunt commenced about two miles to the south of a lake called Löf-sjön. The first day I had sixteen men, as also a *Rygg-värn*—that is, an individual on whom reliance could be placed to guard my person. In several instances I was within a few paces of the bear, but owing to the denseness of the cover was unable to fire.

"On the following morning our party was increased to twenty-five, but several small boys were included in the number. I now performed, so to say, a sort of miracle, having made so small a Ring around the bear, that even our little force was sufficient to encompass him; but the smallness of the circle had this disadvantage, that from not being more than one hundred to one hundred and fifty paces in diameter, we were in consequence exposed to great danger, for every bullet whistled about our ears.

"Near to the centre of the Ring was a close brake, wherein the bear took refuge. I was there myself more than once for the purpose of dislodging him; and several random shots were also fired into it with the like object: but still he would not leave his retreat. After a while, however, he was seen,

and shot at by two brother sportsmen, whose balls, taking effect alongside of each other, broke one of his fore-legs near to the shoulder; subsequently another man fired at him, but missed.

"Everything remained quiet for a long time. I then proceeded to the spot where the bear had been last seen, and followed his track with the object of again rousing him. The cover was very close, and there was much snow in the trees, so that I could not see more than a few feet ahead. I advanced with great caution about forty feet into the Ring, when from a very dense thicket, at not more than two feet distance, *Nalle** suddenly rushed upon me. His rage was excessive, and growl most awful. Owing to his near proximity when he charged, I had no time to fire.

"He first gave me a blow on the chest, which knocked me backwards into the snow; when seeing that his intention was to seize my head, or the upper part of my body, I thrust the barrel of my gun, whilst in the act of falling, into his open mouth. This he pressed upon to such a degree, that it went down his gullet nearly up to the lock, and the barrel was in consequence much injured by his teeth. With my whole force I now kicked the brute so hard on the head as to cause him to disgorge the barrel, and to move off to a little distance.

"But it was only for a few moments, for he rushed on me a second time with even more fury than before. He laid hold of my unfortunate legs with his fangs, and raising himself on his hind feet, thereby reversing my natural position, he shook me with such vengeance, that my person resembled the clapper of a church-bell when taking

* The nickname for a bear, as with us Reynard is for a fox.

part in the performance of a triple bob major; and as a consequence, the contents of my kit, consisting of a brandy-bottle, bread, a sausage, &c., were scattered here and there in the forest.

"Though the ringing to which the beast subjected me was carried to a most inconvenient extent, I nevertheless retained sufficient presence of mind, suspended by the heels as I was, to give him several severe blows on the head with my gun, which at length caused him to loose his hold and to retreat.

"Whilst thus suffering tribulation, I shouted lustily for help; but owing to the horrible roarings of the bear, the people did not hear my cries; nor was a comrade, though only at some twenty paces distance when I was first assailed, able, from the thickness of the cover, to reach the scene of action prior to the departure of the beast.

"After leaving me, the bear sprang to the opposite side of the Ring, where three shots in the body terminated his existence.

"It proved a female, and amongst the largest of the species. Five or six years previously she had been caught in a steel-trap, but contrived to escape with the loss of a paw, which was subsequently brought to me. It was singular enough that, after so long a period, the bear and the amputated member should join company again.

"The beast was very fat, and said to be delicious eating. For my part, however, though she had been so very loving towards me, and made so free with my flesh, I had no inclination to try the flavour of hers."

M. Ullgren gradually recovered. Some laughed at the adventure, for the reason, that he who had been subjected

to such scurvy treatment, was the son of a *Klockare*—that is, the clerk of the parish, on whom the duty partly devolves (in the rural districts at least) of ringing the church bells. But the hero of the tale, with a woeful countenance, rejoined that, "though to ring was well enough in its way—to be 'wrung' was not only most unorthodox, but very particularly disagreeable."

Though the peasants in the northern forests often display much gallantry when attacking the bear, yet owing to inexperience and mismanagement, the beast frequently makes much havoc amongst them. This was the case at a Chasse that took place some years ago, near to Loos, in the parish of Färila, and the province of Helsingland.

The individuals engaged in the hunt in question—so goes the story—were Olof Munter, his brother Lars Olsson, Eric Thomasson, and Matts Persson. The bear had been ringed early in the autumn, and on the 17th of December the parties named proceeded to the forest to compass his death. All had rifles, and two of them were provided with axes in addition. They were accompanied by two dogs, though both totally untrained to bear-hunting.

By break of day the men had already been an hour on foot; but as they were still about two miles from the Ring, and as there was much snow in the trees, every one carried his gun in a *foderal*, or case. Whilst thus traversing the forest, and not dreaming of danger, one of the party, Thomasson, bethought himself of reconnoitring an old Björn-Ide that he was acquainted with, which lay very nearly in their route. It was situated under the root of a large pine that had been prostrated by the wind; but as the dogs had already run along the trunk of the tree, and even

sprung over the very mouth of the den itself without showing symptoms of finding anything; and as besides, the den had been unoccupied during the three preceding winters, the hunters never conceiving it possible that it was tenanted, they were incautious enough to go close up to it without first taking the precaution of divesting the guns of their cases, or even of priming them.

Whilst, however, Thomasson was peering under the root, and probably from his long *Skidor** causing the bear dis-

* A kind of snow-skate, the nature of which will be readily understood by reference to the several illustrations in this work descriptive of bear shooting in the winter time. In Wermeland and Dalecarlia, the *Skida* for the left foot is usually from nine to eleven, or even twelve feet in length; whilst that for the right seldom exceeds six to seven. This inequality of length is to enable a person to wheel about, in a manner difficult to describe in writing, with greater facility; as well as that, when in broken or bad ground, he may lean the whole of his weight, if necessary, upon the shorter Skida, which is constructed of stouter materials. The usual breadth of the Skidor in the provinces named, is between two and three inches. In parts of Lapland, Finland, and Norway, those that I have seen are much broader, and also of equal length, which seldom exceeds six or seven feet. The foremost ends of all Skidor are considerably turned up, to enable a person to avoid any little impediment with which he may happen to come in contact. They are fastened to the foot with withes, or with leathern straps, in so simple a manner, that a minute or less will suffice either to put them on or take them off. A pair may weigh from ten to fifteen pounds. The weight, however, is of the less consequence, as it rarely happens that one is necessitated to carry them. In very mountainous districts, the under part of the Skidor—of the shorter one, at least—is often covered, either wholly, or in part, with seal or other skin; this in a great degree prevents a person from retrograding when ascending a steep acclivity. Unless the snow is in an unfavourable state, they are never lifted from the ground; the motion is of a gliding nature, and, excepting as regards rapidity, something similar to that of the skate in common use in England. In some instances, a person carries a single stick in his hand; in others, one in each hand. These serve to impel him forward, and also to retard his progress (which he effects by pressing the stick upon the snow) when too rapidly descending a hill.

turbance, Nalle suddenly rushed forth, and upsetting the astounded man, though fortunately without injuring him in any way, made off as fast as his legs would carry him. By the time, however, that he had gone about one hundred and fifty paces, Munter, who had the command of the hunt, having put his gun in order, fired; and as was afterwards ascertained, actually emasculated the beast. Stung by the wound probably, the bear halted for a moment, which gave Persson the opportunity of saluting his hind-quarters with a second bullet, on which he continued his retreat, and was soon lost to sight.

Munter remained on the spot to load, but the other men pursued the bear. The snow, which was deep, would support the Skidor but not the beast; and as Olsson was the best runner, he soon left his comrades far behind. After proceeding a few hundred yards, however, and whilst following the bloody Spår of the bear, the latter suddenly and most unexpectedly rushed upon him. The beast had made a sudden double, parallel with his first track, and had crouched in a thicket, in ambush, as it would seem, for his pursuer. The onset was so sudden, that the man had no time to fire; but he drove his gun crosswise into the distended jaws of the brute, which bit the stock through near to the lock, and then cast the barrel high up into the air; and as Olsson had now no other weapon wherewith to defend himself, the bear seized him with both paws, and throwing him backwards on to the snow, inflicted many and deep wounds on his head and face. Then turning the poor fellow partially round, and placing his own ear to that of his victim, he listened, for the purpose of ascertaining if there was any life remaining. But when he remarked that the

man still breathed, he seized hold of his left side, and lifting him from the ground, cast him to and fro, and shook him with so much violence that his very bowels protruded through the wound. Afterwards he repeated the same manœuvre with his right side, and also inflicted several deep wounds on his elbow and thigh. As may be supposed, Olsson was now more dead than alive, and in reality had long before lost his senses.

Whilst this tragedy was enacting, the comrades of the poor sufferer stood at a distance of about forty feet, altogether immovable, and as if riveted to the spot. This inactivity may be partly ascribed to the belief generally entertained by the peasants, that if one fires at such a time, the bear, unless killed outright, is sure to make an immediate end of his victim. But it is probable also that fear, on this occasion, had something to do in the matter.

Munter, however, who had now reached the scene of action, hesitated not a moment on going to the rescue of his brother; but before he had proceeded about thirty feet the bear dropped the wounded man, and resting his fore paws on the poor fellow's body, undauntedly looked his new antagonist in the face. Munter, deterred by the cries of the others from firing, was now induced to lay aside his rifle, and grasping his axe in its stead, he gallantly advanced to the attack. But when he had approached to within four or five feet of the bear, the latter left his victim, and quietly retreated farther into the forest.

Thomasson, who was behind a bush, now fired, and sent a ball after him, which, however, went wide of the mark. Nalle, on receiving this fresh salute, hastily wheeled about,

and with a terrible growl, rushed at his assailants. Munter was the nearest to him, and was in the act of retracing his steps, for the purpose of recovering his gun; but being encumbered with Skidor, and unable to get out of the way quick enough, the beast was in a few seconds up with him, and cast him headlong to the ground. As, however, he lay with his face deeply buried in the snow, and had besides the presence of mind to hold his breath, he, though severely wounded, escaped somewhat better than his unfortunate brother.

After a time the bear, of his own accord, left Munter, and went back to the spot—which was at a very short distance—where he had so cruelly maltreated Olsson. But the man, in the interim, had so far recovered himself as to be enabled to crawl under a neighbouring bush, which hid him from sight, and he therefore escaped a second visitation. The beast, however, paced round and about the bloody arena where the combat had taken place for some little time; but not finding his expected victim, he at length took himself quietly off. And there was no obstacle in his way, the two men with whole skins having no inclination farther to molest him.

For this day the hunt was therefore at an end; but on the following morning, the 19th, Thomasson and Persson, together with four others, renewed it. But on this occasion, however, more precautions were used; for the men now kept close together, so as to be enabled to assist one another in case of need.

As the track of the bear leading from the late scene of conflict was marked with much blood, more especially in such places as he had rested on, the men soon expected

to find his corpse. But they had not proceeded more than half a mile when, to their astonishment and dismay, the beast suddenly rushed from out of a thick brake, and charged them—and this with such rapidity, that it was not until he was on the very point of seizing one of the party, that Olof Ersson, a youth of eighteen, who had never before seen a bear, was enabled to send a ball into his eye. The hurt, nevertheless, did not prevent the beast from casting Persson to the ground, and wounding him in the head and in the right arm. And it might have fared still worse for the poor man, had not Ersson come to the rescue; who, throwing aside the discharged gun, with his axe dealt the bear so desperate a blow on the head (so severe a one, indeed, that Persson, whose skull he was gnawing, fancied he felt the fangs of the beast to loosen) as to prostrate him on the body of his victim. The bear, however, made an effort to rise, but at the same moment two bullets, fired by others of the party, pierced him to the heart.

It was an old male; in colour, black-grey, with the points of the hair lighter. The skin, although shrivelled when brought to the market at Gefle, measured upwards of eight feet in length.

All the wounded men finally recovered; but the hurts of more than one were of so serious a nature, that they would probably suffer from them as long as they lived.

CHAPTER XVIII.

M. FALK—HIS SKALLS—FEROCITY OF THE BEAR—ENORMOUS SIZE.

On more than one occasion, whilst sojourning at Ronnum, as well as subsequently, I paid flying visits to my Wermeland friends; amongst the rest to M. Falk, who, though advanced in life, is still in the enjoyment of excellent health, and as renowned as ever for his Skalls. But as bears are now somewhat scarce in his district, he has not of late years been nearly so fortunate as in bygone days.

I subjoin an account of several of M. Falk's earlier and more remarkable Skalls. Slight mention, it is true, was made of more than one of these great hunts in my former work; but as the present details, penned by M. Falk himself, are not only fuller, but contain much new matter, I doubt not they will prove acceptable to the reader. In the Skalls spoken of, it may be proper to remark, great numbers of men were generally engaged, in some instances probably a thousand or more.

"Winter Bear Skall, near to the lake Stora Ullen, in the parish of Råda, 15th of March, 1815.

"The Cordon having been formed, the Dref was ordered to advance; but it had not proceeded far before a *Jägare* (Chasseur) belonging to that division came directly upon the bear, who, whilst leaving his den, growled fearfully—his usual token when bent on mischief. To avoid being bitten, the man instantly cast himself backwards into the snow. So soon as the enemy had passed him, however, he got on to his legs again, and fired, the bullet passing obliquely through the body of the beast. At first there was a great flow of blood from the wound, but this, after a time, ceased in degree.

"When the Skall had progressed somewhat, and the bear was again roused, he, without its being possible to stop him, rushed at another Jägare, by whom he was also wounded; not sufficiently, however, to prevent him from springing on to a boulder, or fragment of rock, where his assailant, after firing, had taken refuge. Seizing hold of him with his paws, he cast him down from thence, and buried him in the deep snow beneath; but happily, although the beast tore away the collar of the man's upper coat, he in no wise injured his person.

"The bear now charged a pikeman, overthrew him, bit a large piece out of his thigh, and tore off the lower part of his nose, so that it hung over his mouth; afterwards he broke through the Ring.

"A Jägare, near at hand, by taking a short cut, succeeded in coming up with the beast, whom he would probably have killed had not his gun unfortunately missed fire. The bear now rose on his hind legs, and with his fore paws embraced

the shoulders of his new antagonist; whilst the man, on his part, seized the beast by the ears, and the shaggy portion of his hide thereabouts. The bear, greatly weakened by loss of blood, and his opponent a man of uncommon strength, whilst thus grappling with each other, twice fell to the ground together, and again resumed an upright position, without either letting go his hold of his adversary. During the fearful struggle, both arms of the man were severely bitten above the wrist. At first, the bear was only enabled to reach the upper part of the man's body with his claws; but now that the poor fellow was greatly exhausted, and no longer able to keep him at a distance, the jaws of the beast all but embraced his throat. At this critical moment I luckily reached the spot, and quickly put an end to the very unequal combat.

"Both of the wounded men were subsequently conveyed to Risäter; and though the cure was slow, they eventually recovered. To this day, however, the nose of the one is deeply scarred, and the arms of the other have never regained their proper strength."

"Winter Bear Skall, near to Mukelstorp, in the parish of Sunne, the 15th of April, 1817.

"Four bears—a female with three yearling cubs—were disturbed from their winter quarters and ringed. When the season is far advanced, these beasts seldom remain stationary at each of their new lairs for more than a few hours together; and I therefore considered myself lucky in encircling them on the day mentioned. Fine weather and *godt Skar-före* *

* *Skare* signifies a crust on the surface of the snow; godt Skar-före, that the crust is sufficiently hard frozen to support man or beast.

greatly facilitated my operations. About eleven o'clock A.M., by which time the Dref had advanced very considerably, and whilst standing at the foot of a declivity, all the four bears came directly towards me. The two foremost I had the good fortune to kill with my two rifles. The other two immediately wheeled about, and made for the opposite side of the Ring, where they were received with a lively *Jägare-eld*—meaning a running fire—extending along the whole line, and soon also met their doom. Within a quarter of an hour of the first shot, all the four bears were placed in a heap. At the toasts, drunk commemorative of our success, the bloody pile served instead of tables and chairs, for the more distinguished of the individuals present."

"Great Summer Skall, near to the lake Knon, in the parish of Ekshärad, 16th of June, 1818.

"The considerable ravages committed by wild beasts in this district, rendered a summer Skall necessary, and one accordingly took place. But when the circle was contracted to within the smallest possible compass consistent with the safety of the men, without a bear showing himself, I almost came to the conclusion there were none within the Ring, and was therefore about dismissing the people to their homes. Whilst this point was under discussion, however, two of those beasts—both of very large size—suddenly rushed upon us. One of them I was so lucky as to shoot myself. The other bear headed about and dashed at the opposite line, where he was immediately received with a very heavy fire, and badly wounded: to that degree, indeed, that a Jägare was enabled to follow him along the line so very closely, that the muzzle of his gun, which he made

various ineffectual attempts to discharge, all but touched the breech of the beast. Nalle, becoming at length enraged, turned on his assailant, whom he seized by the calf of the leg, and threw to the ground, and then laid himself at length, and with all his weight, on the body of his victim. The man now used every effort to draw his knife, that he might cut the throat of the beast; but from the weapon being deposited in his undermost pocket, he found this to be impracticable. The poor fellow was therefore necessitated to wait patiently until assistance arrived, when the death of the bear relieved him from his disagreeable and heavy burthen. Happily, beyond the wound in his leg, and the effects of the squeeze to which he had been subjected, the man escaped farther injury."

"Great Summer Skall near to Gillermyren, in the parish of Råda, and Elfdahls Härad.

"The *Skall-plats*, or area embraced by the hunt, was some fourteen miles in length; its breadth, where the hunt commenced, nearly seven miles; and about two where it terminated.

"It was near sunset before the Dref had neared its destination; when, at one and the same time, six large bears came *sträckande*, or driving, some following the long, narrow morass, and others the side of it. Five of the beasts were shot within an hour. The sixth, which was badly wounded, and when it was dusk, rushed at a pikeman, who received him on the point of his weapon; but the shaft of the spear breaking, the beast seized hold of the poor fellow's head with his claws, and tore off the skin and hair from the nape of the neck to the forehead, so that

the scalp hung over his face. After the performance of this feat, the bear broke through the Cordon, and was not killed until the following day. The wounded man was conveyed to Risäter, where his scalp was replaced, and sewed on again; he recovered, but was bald ever afterwards."

"Great Summer Skall, near to the lake Lilla Ullen, in the parish of Råda, and Elfdahls Härad, 28th of August, 1819.

"The Skall-plats was ten miles in length; the breadth at the commencement of the hunt, seven miles; and at the termination, nearly one mile.

"A heavy and continued rain so impeded the movements of the people, that at dusk the Skall was only so far advanced, that the bears and wolves within the Cordon began to show themselves. Seeing the impossibility of bringing it to a conclusion that day, I came to the determination of compressing the circle as much as possible, so that we might with the greater certainty keep guard during the night over the imprisoned beasts. Whilst this operation was going on, and when it was half dark, and the greater portion of the guns useless from wet, we killed one large bear and three wolves.

"After the Skall had come to a halt, a sort of barricade, consisting principally of large fir-trees felled lengthwise, and afterwards kindled, was formed all around the enclosure. Whilst the one-half of the people kept watch, the other half were permitted to sleep. Patrols, moreover, constantly went their rounds in different directions, letting their presence be known by their challenges.

"During the first part of the night the imprisoned beasts were in incessant motion. The bears in particular came, in

several instances, so near the fires, that lighted brands were cast at them by the people ;—one, indeed, carried away some live coals in his shaggy hide !

" But towards morning all was still. At day-light, we found that in the darkness of the preceding evening the circle had been so much contracted, that the people could not fire with safety, and in consequence I now caused them to fall back considerably; but in spite of the noise caused by this operation, the imprisoned beasts did not show themselves.

" Fully convinced, however, that they had not escaped us during the night, I now led a small party of men to a dense brake within the Ring—where I had reason to believe they might yet skulk—for the purpose of forcing them on the line. So soon as this movement took place, two large bears, four wolves, and three lynxes, as likewise a multitude of hares, that had here had their *Syskon-säng*,* then appeared; and as the guns had been put in order during the night, they were received with a very heavy fire from all sides. I myself shot the largest bear, and afterwards two lynxes and three wolves. Within half an hour all the beasts were killed. Including those shot the preceding evening, the returns consisted of three capital bears, seven wolves, and three lynxes."

" Summer Skall, near to Ullen, in the parish of Råda, and Elfdahls Härad, 16th of September, 1823.

* *Syskon* (for which there is no equivalent in English) means brothers and sisters collectively. *Syskon-säng* implies a temporary bed of straw, or what not, on the floor of an apartment or out-building, occupied by the sexe indiscriminately. During my wanderings in the northern forests, it often happened that several of us, strangers to each other, when taking shelter under a friendly roof, and when proper accommodation was wanting, thus pigged together.

"Before the Skall was brought so near to a conclusion, that the bears could with any certainty be kept within the lines, an enormously large bear attempted to break through the Dref. After he had received several balls, one of which carried away his two lowermost fangs, together with part of the jaw-bone itself, and another that passed through the upper part of his thigh, he rushed with an unwonted degree of fury on the people; and notwithstanding their very gallant opposition, he attacked one man after the other, so that, almost at the same time, he wounded no less than six individuals—two of the number so badly, indeed, that they had to be borne from the field. He then broke through the line, and for the time escaped.

"A young Jägare observing this, and by taking a more direct course than the bear, succeeded in intercepting him; but in attempting to fire, his gun would not go off, on which the beast forthwith charged and laid him prostrate; and whilst with his fore paws, placed over the poor fellow's shoulders, he pressed him to the earth, he not only scalped the half of his head, but inflicted no less than thirty-seven wounds on his body. Had the man been lying on his back instead of his face, and that the lower fangs of the bear had not been previously shot away, he must inevitably have been killed. Although there were many spectators to the tragedy, there was no one present who had the means of rendering assistance. So soon as the man remained perfectly motionless, however, the bear left him of his own accord, and retreated.

"An unusual murmur, indicative of distress, coupled with cries and lamentations, caused me to hurry to the spot. My first care was to have the sufferers (after that their wounds

had been bound up) conveyed home; my second, to fill up a gap in the Dref, of at least four hundred feet in length, caused by the fright the recent catastrophe had occasioned. A halt was now ordered, it being believed that a bear was still within the Cordon.

"As there was every reason to suppose that the bear which had escaped from us was badly wounded, I now went in immediate pursuit of him. After breaking through the line, and proceeding some little distance, the beast had, it appeared, doubled back upon the pathway I was pursuing, so that I had not proceeded far when we fortunately met face to face. A deep growl was the first intimation I had of his presence. So soon as I caught sight of the bear I dashed at him. At our best pace we attacked each other: on my part, with no other fear than that if I missed him, he might, whilst I was reloading, either attack me, or escape altogether out of my sight; for I saw from the first, that owing to the wound in his thigh, I could run the faster of the two. At length, however, and when about twenty feet off, I got a good shot at the beast, when I put a bullet right through his heart. This was at so great distance from the Skall, that only those men nearest to the spot, heard the report of my gun.

"Another large bear, though of a more pacific disposition, was, as I had supposed, still within the Cordon. But this beast was not killed until the circle was contracted to the utmost, and even then I could with difficulty drive him to within reach of the guns.

"The first bear was unusually large—the largest, indeed, that I ever saw. Six men, with a stout pole inserted lengthwise between his shackled legs, and four others with poles

placed crosswise, could with difficulty carry him a short distance. I have shot many bears which weighed about thirty lispund* (near six hundred English pounds); but all these were much smaller, so that I cannot calculate the weight of this bear at less than forty lispund (near eight hundred pounds)."

M. Falk winds up this account of his performances, dated some years back, by saying: "I have have had a great number of, more or less, successful Skalls. In many of them, three or four bears have been killed. But unless some extraordinary incident occurs, it does not appear to me worth while describing how these beasts simply die; and I therefore do not enter into farther particulars. Large and small together, I have killed in Skalls eighty-six bears!"

* In the above calculation, I assume *Victualie* weight, which, in Sweden, is used for all general purposes, to be that meant by M. Falk; but I have nevertheless my suspicions, that he refers to *Bergs* weight, which is about eleven per cent less.

CHAPTER XIX.

KING FREDERICK I. OF SWEDEN—HIS GREAT SKALLS—ANDREAS SCHÖNBERG—DOGS—GREAT EXECUTION.

MENTION was made in my former work of several of the great Skalls that took place in the time of Frederick I. of Sweden, under the command of Hof-Jägmästare* Andreas Schönberg, a man far-famed in his day as the slayer of wild beasts. I now subjoin an account (penned by Schönberg himself, and annexed in the shape of notes to the plans of each) of the remainder of those he organized for the amusement of that monarch. The winter Skalls, it should be remarked, were in general round or oval; whilst those that took place in the summer were, for the most part, somewhat in the shape of a sugar-loaf.

No. 1.—"The first Skall that the King honoured me with

* This title may be rendered Hunting-master to the Court.

his commands to organize," says Schönberg, "was towards the end of July, 1720, near to Buskara, in the parish of Nora, and province of Westmanland. Each wing was three thousand one hundred and fifty paces in length; breadth at the commencement, two thousand one hundred paces.

"His Majesty, accompanied by his Serene Highness Prince William of Hesse, was then on his way to Gefle, to inspect the Finnish army which was assembled there; and as the Prince was desirous of hastening back to Germany, I was graciously ordered, against their return, to look for a suitable locality for a small Skall that would be concluded in a single day; and this even should there be only a single bear within it, so that the Prince, who had never seen that beast in a hunt, might have the opportunity of shooting one.

"As I knew, that during the whole of the past spring a capital bear had had his haunts thereabouts, I immediately caused the needful preparations to be made for the Skall. But that the beast might not be disturbed, I directed that, instead of cutting *Skall-gator* (paths or rides, as we would say) through the forest, to direct the movements of the people, the trees should be simply scored with the axe; and even this operation was not performed until all the men and the *Jagt-tyg* * were in their proper places.

* Nets, and so called *Lappar*. The latter consist of pieces of coarse canvas of about three feet in length, and of breadth proportionate, on which Saracens' heads and other ugly devices are painted in very vivid colours. These Lappar are suspended, at short intervals, to a line of great length, which is supported by upright forked stakes at a few feet from the ground; and when fluttering in the wind, are not only enough to turn back wild beasts, but to scare the fiend himself. At times the Jagt-tyg is of great length: in one instance in the present chapter, we read of its circumventing a wood six thousand two hundred and seventy-four paces in circumference.

"The royal party having arrived, the Dref moved forward, and when the people had advanced half-way, the bear showed himself three to four times near to the King's *Skiärm*, or screen.* But his Majesty always allowed the beast to pass unmolested, that the Prince might have the pleasure of shooting him. At length he came near to his Serene Highness, who fired, but only wounded him. The bear, on receiving the ball, immediately rushed towards the Jagt-tyg opposite, threw down two men, one of whom he wounded in the leg, and the other in the knee, and breaking through the line, made his escape. The dogs were sent in pursuit, but could never overtake him.

"His Majesty afterwards shot a lynx and four foxes, as also a number of birds and hares; and his Serene Highness the Prince, six foxes, together with abundance of smaller game."

No. 2.—"Bear Skall, 22nd of September, 1720, in the forest of Forssby, and parish of Skultuna, Westmanland. One wing was six thousand one hundred and forty-nine paces in length, the other eight thousand six hundred and sixty-eight paces.

"I had the honour to conduct this Skall to his Majesty's high gratification. On this occasion the King, with his own high hand, shot a large she-bear, and wounded a smaller one, which was afterwards killed by the gentlemen present. A moderately large bear was besides wounded, and then worried to death by his Majesty's dogs. A wolf and five foxes, together with a tolerably large number of hares and birds, were also killed. All the foreign ministers and other foreigners of distinction, were present at this Skall."

* A kind of hut, composed chiefly or wholly of boughs, erected just within the Skall-plats, for the accommodation and protection of the King and others.

No. 3.—"Elk Skall, 24th of September, 1720, near to the post-house of Nyqvarn, on the borders of Westmanland and Upland. The Jagt-tyg surrounded the whole of the small *Skogs-backe*, or wooded eminence, on the Upland side, embracing an extent of six thousand two hundred and seventy-four paces.

"When the bear Skall in the parish of Skultuna was over, I received gracious orders from the King, to ascertain if any elks were to be found, not far distant from the road, between Westerås and Ekholmsund, so that his Majesty, on returning from the former place a couple of days afterwards, might have the pleasure of shooting them. I was so fortunate on the following day as to meet with five of those animals, that frequented the above-named little wood; and the whole of them, after the King's gracious arrival at the Skall—which did not take place until the afternoon—were, within an hour, killed by his Majesty's own high hand."

No. 4.—"Bear Skall, 7th of December, 1720, near to By, in the parish of Harbo, Westmanland. Circumference of the Skall-plats, about three thousand four hundred and fifty-two paces.

"On the 27th of November, a peasant from the village of Marstalla, reported to me that on the 24th of the same month, he had ringed in his allotment of the forest, a she-bear and her four yearling cubs, which during the previous night had crossed his grounds; but that as immediately afterwards there came on a severe snow-storm, which obliterated their tracks, he was not altogether certain that they were still within the circle. For this reason, and prior to sending in my humble report, I deemed it desirable to get

the bears on foot again, by means of a Dref-Skall, and to ring them afresh.

"This took place on the 29th of November, the men engaged in it being from the nearest villages in the parish. But when the people had gone over the Ring made by the said peasant, and no bear was found, every one present was of opinion that the beasts had left it during the recent snow-storm, and gone elsewhere. The peasant himself, however, thought differently; and said that if the people would wait awhile near to the village, he would with all haste run back to the forest, and examine a particular stone under which, on former occasions, bears had had their winter quarters.

"His request was granted; and in half-an-hour he returned and reported that his supposition had proved correct; for that all the beasts, with the exception of the mother, were actually lying beneath the stone in question. She, it appeared, on his peering under it, sprung out on the instant; and though without injuring him in any manner, in passing, knocked him heels over head, and gone her way.

"The other peasants would not credit this intelligence, and several of them hastened to the spot indicated to see for themselves; when they presently found that their companion had told the truth. It appeared by the tracks in the snow, moreover, that during the Skall two of the men had actually passed over the very stone (which was flat, and but little elevated above the ground) under which the bears were then lying, and that all the five had nevertheless remained perfectly still. Three of the cubs were immediately killed by the people, but the fourth was brought back by them alive to the village.

"A *Skytt* (implying a Jägare, or Chasseur) was forthwith ordered to follow on the Spår, and to ring the large bear. For six days, however, she incessantly traversed the forest far and wide, her peregrinations extending over several different parishes, without her showing any intention of again betaking herself to rest. But at length she returned to the very part of the forest where she had left her young ones—not to the same stone, it is true, but she made for herself a lair above ground at some distance therefrom, where she remained quiet until the King's arrival.

"As his Majesty was graciously pleased to select for himself another place at the Skall than that originally designed for him, and where he indeed stationed himself in the first instance, it so happened that Hof-Jägmästare Count Spens, who remained at the spot vacated by the King, was first aware of the bear, and wounded her. His Majesty now ordered that all the dogs should be slipped, and the beast worried. This was done, and when they at length held her fast, the King proceeded to the spot, and with his own high hand pierced her to the heart with a bear-spear."

No. 5.—"Bear Skall, 8th of December, 1720, in the forest of Ljusbeck, and parish of Nora, Westmanland. Circumference of the Ring, two thousand five hundred and seventy-six paces.

"At this little winter Skall, his Majesty shot with his own high hand, a somewhat angry and malicious bear."

No. 6.—"Bear Skall, 9th of December, 1720, in the forest of Norra Åshbo, near to Dunsjön, in the above parish. Circumference of the Ring, one thousand nine hundred and ninety-four paces.

"At this small winter Skall, which was organized by me for his Majesty, a large she-bear, and a somewhat smaller she-bear, were shot by the King's own high hand. His Majesty also wounded a male bear, which was afterwards worried to death by the dogs.

"All these three bears lay in an *Ihåligt Stengröpe*—that is, in a deep cavity, amongst a mass of fragments of rocks; for which reason they were, in the first instance, passed altogether by the driving division of the Skall. As, however, the peasant, when ringing the beasts, noticed the direction they had taken, and knew where they were, it was graciously ordered, that either by blank shots, or otherwise, they should be driven out from their place of concealment. But as firing had not the desired effect, one of the attendants, provided with a stake, resolved on creeping into the hole and dislodging them; and when the beasts became aware of his presence, they all three, in forcing their way out of the hole, sprang over his body, though without doing him the slightest injury."

No. 7.—"Bear Skall, 10th of December, 1720, in the forest of Norsjö, and parish of Löfsta, Westmanland.

"At this Skall, arranged by me for the King, a capital bear was shot by his Majesty; the beast was dead within eighteen minutes from its commencement."

No. 8.—"Elk Skall, 30th of December, 1721, in the forest of Budkarby, and parish of Nora. Circumference of the Ring, six thousand eight hundred and ninety-two paces.

"On the 26th of December, by means of an express from the royal court, I received gracious orders to ascertain, either in the parishes of Wåhla, or Harbo, or in that of Nora, where some elks were to be found; the King, then on his

way to Dalecarlia, being desirous of shooting some before the termination of the year. On the 28th I therefore proceeded to Upsala, there humbly to wait on his Majesty, and to report that four male elks were already ringed; and in consequence I received orders to arrange the Skall for the 30th. On that day all the animals were killed by the King, who afterwards prosecuted his journey."

[Nos. 9, 10, and 11.—These Skalls, which are not of any particular interest, are made mention of in the "Northern Sports."]

No. 12.—"Elk Skall, 14th of August, 1724, in the forest of Fasenbo, and parish of Löfsta. The Skall-plats an elongated triangle; the wings three thousand three hundred paces; with an extensive *Sido*—(or lateral) *Dref*.

"At this Skall, which I had the honour to organize for his Majesty, two elks, three wolves, together with several hares and birds, were shot."

No. 13.—"Bear Skall, in the forest of Opsala, and parish of Berg, Westmanland. The Skall-plats also an elongated triangle.

"At this Skall, which was less than two miles in length, a tolerably large bear was shot by his Majesty."

No. 14.—"Bear Skall, 26th of August, 1724, in the forest of Östersura, and parish of Sura, Westmanland.

"At this Skall, which was little more than two miles in length, two large bears, and a very large male elk, were shot by his Majesty's own high hand."

No. 15.—"Elk and Bear Skall, 18th of September, 1724, in the forest of Hanberga, and parish of Skultuna, Westmanland. The Skall-plats triangular in form, the wings three thousand paces in length.

"At this Skall, which I had the honour to organize, his Majesty himself shot two elks, one wolf, and one lynx. There was also a capital large bear enclosed, which three several times was driven forward to the King's screen; but his Majesty would not fire, preferring rather the pleasure of worrying the beast with the dogs. These were, therefore, all let loose upon the bear; but he nevertheless beat them off, and rushing through the Jagt-tyg, escaped altogether."

DOGS AND BEAR.

Much mention, it will be observed, is made by Schönberg, of dogs at these great hunts. If the accompanying spirited

sketch, copied by a friend, from a picture at the Royal Palace of Drottningholm, represents those used by King Frederick, they must have been large and powerful animals; and with a full-grown bear courage and strength, as we have seen and shall see presently, are much needed. In point of fact, I do not believe a score dogs, however big, would stand the shadow of a chance with such a beast as that at present in the Zoological Gardens, in the Regent's Park.

No. 16.—"Elk Skall, 6th of September, 1727, in the forest of Botbo, and parish of Möklinta. The Skall-plats an irregular triangle, the wings five hundred and five* paces in length; with an extensive Sido-Dref from the parish of Nora.

"At this Skall, which I had the honour to arrange for his Majesty, fifteen elks were killed, the greater part by the King himself. Three or four bears had also been seen the day before within the Skall-plats; but during the preceding night (as I myself ascertained when going my rounds), some mischievous person had purposely thrown down a portion of the Jagt-tyg, thereby causing a large opening, by which the beasts had made their escape. It was great good fortune, therefore, that the elks remained, and that his Majesty had the gratification of shooting them. But the individual who committed this infamous deed, was acquainted, it would seem, with the nature of the animals, and well knew that bears, when they are driven and afterwards confined, are constantly in motion, and endeavouring to find an opening whereby to escape; whereas elks, on the contrary, will, if undisturbed, remain stationary, at one and the same spot during the darkest hours of the night."

No. 17.—"Elk Skall, 13th of September, 1727, in the

* It would almost seem as if a figure were omitted.

Prestskog (the clergyman's forest allotment), and parish of Löfsta. The Skall-plats nearly triangular in form, and each wing about five thousand four hundred and twenty paces in length.

"At this Skall, which I had the honour to arrange for his Majesty, two elks were killed."

No. 18.—"Elk Skall, in the forest of Ramsta, and parish of Kumla, Westmanland. The wings three thousand seven hundred and sixty-four paces in length.

"At this Skall, arranged by me, two elks were also shot. Bears had besides been recently seen in this forest, and done mischief; but when the Skall took place, an opening was left in the driving division of near a mile in extent, which circumstance was in all humility forthwith reported."

No. 19.—"Wolf Skall, 23rd of September, 1727, near to Kungsör, in Westmanland. The wings three thousand five hundred and fifty paces in length.

"On this occasion his Majesty shot three wolves."

No. 20.—"Wolf Skall, 25th of September, 1727, in the Prestskog, of Munketorp, Westmanland. The wings three thousand two hundred and fifty paces in length.

"At this Skall three wolves and four foxes were killed."

No. 21.—"Bear Skall, 25th of January, 1728, in the forest of Näsbo, and parish of Wittinge, Westmanland. Circumference of the Ring, two thousand four hundred and seventy-two paces.

"At this little winter Skall, which I had the honour to conduct for his Majesty, four bears were ringed, three of which were shot, and the fourth ordered to be taken living, which was accomplished."

No. 22.—"Bear Skall in the forest of Länna, and parish

of Huddunge, Westmanland. Circumference of the Ring, two thousand six hundred and ninety-two paces.

"At this Skall, which I had the honour to arrange for the King, and within half-an-hour from its commencement, a capital bear was shot by his Majesty."

No. 23.—"Bear Skall, 27th of January, 1728, in the forest of Rödje, and parish of Huddunge.

"This Skall I had also the honour to conduct for the King. A middle-sized bear lay ringed, not far from a lake; and as his Majesty was graciously pleased to allow the beast to be worried by the dogs, I therefore took up the Jagt-tyg by the side of the lake; and after having been wounded he was driven towards the water, but he had not proceeded far before the dogs killed him."

No. 24.—"Bear Skall, 3rd of February, 1728, in the forest of Budkarby, and parish of Nora, Westmanland. Circumference of the Ring, two thousand three hundred and six paces.

"This Skall I had also the honour to arrange for the King; but when it was about to take place, the Major-General Ditfort, from Cassel, was sent by his Majesty to shoot the three bears that were ringed. The largest of them was killed by him; the other two were taken living, and conveyed to Tierp, to which place the King had in the meantime proceeded."

No. 25.—"Elk Skall, 6th of February, 1728, near to Tierp. Circumference of the Ring, seven thousand two hundred and fifty-six paces.

"When I arrived at Tierp, with the two young bears, which had been taken living at the last Skalls in Westmanland, his Majesty graciously ordered me to ascertain

where some elks harboured, that he might have the pleasure of shooting them before returning to Stockholm. On the night of the 3rd of February, therefore, I set off, and on the 4th was so fortunate as to meet with a herd of nine of those animals, not far from Marsjön, in the parish of Tierp, which were ringed at once. A humble report of this circumstance was made on the morning of the 5th, on which day the people were ordered out, and on the following day I had the honour to organize the Skall for his Majesty. And as amongst these nine elks there were eight capital males, it pleased his Majesty to shoot six of them himself; and two others, by permission, were killed by Lieutenant-General Bounebourg, from Cassel, who accompanied the King to see our Swedish way of hunting. The ninth elk, which was a young female, was shot by Major-General Ditfort, from Cassel. When the hunt was over, it pleased his Majesty, with many gracious words, to express the very great gratification that the several Skalls organized by me during his journey, had afforded him."

No. 26.—"Elk Skall, 17th of September, 1828, in the forest of Harberga, and parish of Skultuna. Each wing was two thousand four hundred paces in length.

"On the King's journey from Westerås to Strömsholm on the 16th of September, I received gracious orders to arrange for the following day a little Skall, at which one or two elks might be shot by his Majesty. This was accordingly done, when three of those animals, all males, were killed by him."

No. 27.—"Bear Skall, 31st of January, 1729, in the forest of Hårs, and parish of Wåhla. Circumference of the Ring, one thousand nine hundred and seventy-five paces.

"Having, in the beginning of the year 1729, received a

gracious order—by means of Dref-Skalls—to get bears on foot, as well here as in the province of Gestrikland, and afterwards to ring and watch the beasts until his Majesty came and shot them, I immediately set out for that purpose, and caused such Skalls to be arranged; and in divers places and districts succeeded in rousing fourteen bears.

"The Skalls commenced on the above-named day in his gracious Majesty's high presence, here in Wåhla, where five bears were ringed in three several parts of the forest; and the first was shot by him early in the morning within the space of an hour."

No. 28.—"Bear Skall same day, in the same tract of forest. Circumference of the Ring, two thousand two hundred and thirty-six paces.

"There lay a capital bear here; but as this beast, when the hunt was about half driven, ran on the people, and severely wounded four or five men, the King ordered that all the dogs, in number about sixty, should be let loose upon the beast, which was accordingly done, when he at once killed six or seven of them;* but he was afterwards mastered by the rest, so that I was enabled to give him a couple of thrusts through the body with my hanger, which, together with his life, put an end to his fury and ferocity."

No. 29.—"Bear Skall, same day, in the same line of forest. Circumference of the Ring, two thousand and twenty-five paces.

"After that his Majesty had been graciously present at the two above-mentioned Skalls, which had afforded him

* Mention was made of this Skall in my former work; but I have introduced it here, to show the treatment high-couraged dogs are likely to meet with from the bear.

high gratification, he proceeded to Hedsunda Parsonage. But to amuse his Serene Highness Prince George from Hesse, his Majesty's highly-to-be-beloved brother, who accompanied him on this journey, he graciously ordered that the third Skall, in the same forest, where three bears were still ringed, should take place. But the above-named Prince, who was no lover of the chase, did not come when the hunt was ready to begin, but gave permission to the gentlemen of his suite, in his stead, to shoot the three bears, which was accordingly done."

No. 30.—"Bear Skall, 3rd of February, 1729, in the forest of Åsbyggeby, and parish of Wahlbo. Circumference of the Ring, two thousand six hundred and forty-six paces.

"At this Skall, which I had the honour to organize, a capital large bear was shot by the King, who, the same day, continued his journey to the parish of Ofvansjö."

No. 31.—"Bear Skall, 4th of February, 1729, in the forest of Kungsgård, and parish of Ofvansjö, Gestrikland. The circumference of the Ring, two thousand nine hundred and two paces.

"This Skall I had the honour to conduct for his Majesty, on which occasion a middle-sized bear, after being wounded by their Excellencies the Privy Councillors, Counts Ture Bielke and Gustavus Bonde, was worried to death by his Majesty's dogs."

No. 32.—"Bear Skall, 5th of February, 1729, in the forest of Ulfsbo, and parish of Eastern Fernebo. Circumference of the Ring, two thousand one hundred and sixty-six paces.

"At this Skall, which I had the honour to arrange for his Majesty, he shot a moderately large she-bear, and also

commanded that the other bear, which was within the same Ring, should, if possible, be captured living, and be conveyed to him at Eastern Fernebo Parsonage, which order, with much difficulty, was carreid into effect."

No. 33.—"Bear Skall, February, 1729, in the *Biskops-boskog* (the bishop's forest allotment for the pasturage of cattle), in the parish of Nora. Circumference of the Ring, three thousand and two paces."

"This Skall I had the honour to arrange for the King, on which occasion his Majesty with his own high hand shot the bear which was there ringed."

No. 34.—"Lynx Skall, 9th of February, 1729, in the parish of Norrby. Circumference of the Ring, three thousand and sixty-four paces.

"After his Majesty's arrival at the town of Sala, the Jägare who, at the Skall at Nora, had been ordered to ascertain if some lynxes were to be found, and could be ringed in the vicinity of Sahlberg, came with the report that he, in the parish of Norrby, had on that very morning encircled three of these animals. I was therefore graciously ordered to arrange a hunt for that same day, which also took place, and by sunset in the evening all the beasts were shot by the King."

No. 35.—"Bear Skall, 12th of February, 1729, in the forest of Eastern Sura, Westmanland. Circumference of the Ring, two thousand one hundred and fourteen paces.

"When the lynx Skall was terminated in the parish of Norrby, I received a gracious order to organize a bear Skall on the above-named day, in readiness for his royal Majesty; but when all things were in order, an express arrived

with intelligence that the King had set off on his return to Stockholm, giving directions, however, that the Colonel Donep, from Cassel, should shoot the ringed bears — a female and her three young ones—which happened in this wise: that after the above-named Colonel had killed the mother, all the three cubs were taken living, and sent with him to Stockholm; and thus this Skall ended well and fortunately this time."

Nos. 36 and 37—"Bear Skalls on the 2nd and 4th of April; the one took place in the forest of Åby, and parish of Sala; and the other in the forest of Fornby, and parish of Möklinta. Circumference of the first Ring, one thousand nine hundred and ninety-six paces; and of the latter, three thousand and sixteen paces.

"As a peasant, in the parish of Sala, on the 4th day of Christmas, met with a Björn-Ide, and the beast sprung up and went his way, of which circumstance I was duly informed, I immediately directed a Jägare to ring the beast for his Majesty's pleasure; and I was the more induced to do so, as another peasant, in the parish of Möklinta, had just before encircled a she-bear with her two young ones. On being advertised of what had occurred, the King sent me word, that at a future time he would come and shoot the bears himself, and directed that, in the meanwhile, the Rings should be well looked after. But as his Majesty was unable from circumstances to leave Stockholm, I received orders to arrange the Skalls for the beginning of April, when some gentlemen from Cassel would by permission, in his stead, kill the beasts. And on the above-mentioned days—namely, the 2nd and 4th of April—all the four bears were shot accordingly."

No. 38.—"Bear Skall, 16th of February, 1732, in the forest of Svina, and parish of Harbo. Circumference of the Ring, one thousand eight hundred and sixty-two paces.

"After the Skall was organized, his Majesty, owing to the extreme severity of the weather, did not venture to be present in person, but deputed several gentlemen in his place, who shot the three bears that were ringed in the above-named forest."

No. 39.—The next Skall got up by Schönberg for King Frederick, took place on the 20th of July, 1732; but mention having been made of it in my former work, the details would here be somewhat out of place; suffice it to say, it was on a very grand scale, and lasted two days, and that the returns were four bears, two wolves, nine male elks, and fifteen female elks, besides a large number of hares and other smaller kinds of game.

No. 40.—"Bear Skall, 13th of February, 1735, in the forest of Nordankil, and parish of Möklinta. Circumference of the Ring, two thousand two hundred and thirty-six paces.

"It was the original intention of his gracious Majesty himself to have shot the bear ringed in the above-mentioned wood, but he afterwards willed that the Imperial Ambassador, M. Herberstein, should, in his stead, have that pleasure; and when the Skall took place, that gentleman was accordingly present. As the night previously, however, a lynx had entered the Ring, and was the first beast that presented itself, M. Herberstein at once killed it. On hearing the shot, the bear, which at this time was not far distant, turned back on the Dref, and was there wounded by the German Jägare, Küfeldt, and afterwards worried to death by his

Majesty's dogs, so that the Ambassador did not see the beast alive."

No. 41.—The last great hunt—mentioned likewise in my former work—that Schönberg organized for the King, commenced on the 1st of September, 1737. It lasted four days, and was on a very grand scale. The one wing was twenty-seven thousand six hundred and ninety paces in length; the other, twenty-four thousand six hundred and seventy-five paces; and the base nine thousand three hundred. The returns were in degree commensurate with the scale of operations, for six large bears, three wolves, three lynxes, one fox, and twelve elks were shot, besides abundance of hares and birds.

CHAPTER XX.

TRAGICAL EVENT.

My friend, M. Falk, as said, still survives; and so do Elg and Jan Finne, others of my old forest comrades. But Svensson, my faithful follower in many a severe bear hunt, is gone to his long home, having perished unhappily by my own hand. Though allusion to the sad occurrence is most painful, still to prevent misrepresentation, and for the sake of those who come after me, I deem it best to tell the tragic story.

The poor fellow had ringed a large bear in a very wild forest tract, lying between the rivers Dal and Clara, in the *Tio-Mil-Skog*, or Ten (Sw.) Miles' Forest—so called, I believe, owing to its extending something like that distance without a break of any kind—but he and two others had previously followed the Spår of the beast for twenty to thirty miles as the crow flies, before they could accomplish their object.

Svensson soon afterwards came to Brunberget, where I was then sojourning, in the Wermeland *Finn-Skogar** (of which the Tio-Mil-Skog forms a portion), and offered me the Ring for a certain pecuniary consideration, contingent, of course, on the bear lying within it. I accepted his proposal, and with Elg in company, started on Skidor for the scene of action. But as we took a somewhat circuitous route to search for another bear, of which we had intelligence, in the vicinity of Dyngsjön, it was not until the evening of the fourth day that we reached Ytter-Malung in Western Dalecarlia, near to which the Ring in question was situated; and here, after making preparations for the morrow, we passed the night.

Long before dawn of the next day, January 15th, 1835—a day that I shall painfully remember to the last moment of my existence—we started for the Ring, which was at seven to eight miles distance. Our party consisted of myself, Elg, Svensson, and the soldier Atter, who had assisted in ringing the bear. We had a sledge, of the sort used by the peasants for the conveyance of fuel, hay, &c., as well that we might benefit by an occasional ride, as with the view of bringing home the bear, which in imagination was already in our

* During the reign of Charles IX. of Sweden—now about two hundred and fifty years ago—considerable numbers of Finns, encouraged by certain privileges and immunities offered them by that monarch, migrated from their native country, and settled in the more uninhabited parts of Wermeland and Dalecarlia. Hence the designation of *Finn-Skogar*, or Finn-forests. The descendants of these people still retain in degree not only the features, but the customs of their ancestors; and some few of the older people, indeed, still speak the Finnish language. As Chasseurs, and as regards a knowledge of all forest craft, these *Finnar*, as they are to this day called, are far superior to their neighbours located in the valleys of the Clara and the Dal.

possession. The vehicle, however, served a widely different purpose.

As the snow was pretty deep and loose, the track bad, and the ground in general rising, our progress was slow, so that it was full daylight before we reached a *Hö-Hässja* (a diminutive sort of hay-stack), situated at the foot of a little eminence in the immediate vicinity of the Ring, from which indeed it was only separated by a morass of no considerable extent. Under the shelter of this Hö-Hässja we seated ourselves, and took some refreshment, which was needed, the walk having sharpened our appetites.

Whilst thus agreeably occupied, Svensson pointed out the Ring, which lay to the westward of us, and the greater part of which was then visible. It was of no great size, but embraced within its circuit a pretty considerable and deeply wooded knoll. "On that eminence," said he, "and at about the middle of it, the bear lies; if not there, he is not within the Ring."

When our frugal repast was ended, Elg, the soldier Atter, and I started for the Ring, leaving Svensson at the Hö-Hässja. Before parting, I strictly enjoined Svensson to remain at this spot until he heard a shot, or that we shouted, in which case he was forthwith to join us, as also to let loose the dog under his charge; and that this object might be effected the more readily, we gave him a knife to sever the cord by which the animal was bound. Elg and myself were armed with guns, but the soldier carried only an axe.

From the distance the bear had gone before Svensson succeeded in ringing him, it was to be presumed he was unusally shy, and therefore not readily approachable; still, as he had not been disturbed for some weeks, and the snow

was loose—a favourable circumstance, as our movements could therefore be conducted more silently—we thought it best, in the first instance, to attempt stealing upon him whilst in his lair; and to give us the better chance, we left our Skidor at the Hö-Hässja; for when the ground is broken, and the cover thick and tangled, one can move about with much more facility on foot, than if encumbered with those implements. On this occasion, owing to the unusual mildness of the temperature, Skidor could not, indeed, have been used to advantage.

According to the testimony of the men at the subsequent trial, it must have been about ten o'clock when we reached the Ring. The weather was very thick and hazy, and sleet was falling, so that objects were not very clearly observable at any considerable distance. It was one of those melancholy days so depressive to the spirits, common with us in England in the winter time, but rare in more northern climes at that season of the year.

On this, as on similar occasions, when attempting to steal on a bear, Elg kept closely at my heels, for the purpose of handing me his rifle, if needed; and Atter, the soldier, followed in his footsteps. We adopted this plan in preference to walking abreast, as well because in the event of our falling in with the bear it gave me, individually, a better chance of getting a shot, as that the odds would have been more against him; for, instead of a single barrel, to which, had Elg been alone, the beast would have been exposed, he was now pretty sure of getting the contents of my two barrels, and not improbably of a third.

In this order we moved slowly and cautiously forward, peering under every boulder, and threading the most tangled

brakes—as it was in such places the bear was most likely to harbour. We were somewhat inconvenienced by the sleet, and the continual dripping of water from the trees and bushes; especially as respected the guns, which, in order that they might be in readiness for immediate use, were divested of their customary leathern cases, and the locks of which we were therefore obliged to cover with the skirts of our coats. For a time nothing was to be seen; but at length a cavity in the face of the knoll in question attracted our attention. It was evidently the work of a bear, and we were at first in hopes that it was tenanted; but this, on closer inspection, proved not to be the case.

The beast thus burrowing was, however, a good augury. The Finnish Chasseurs, indeed, when late in the autumn they fall in with a burrow of recent origin, look upon it as a pretty sure sign that the bear means to take up his winter quarters in the vicinity of the spot. Thinking, therefore, our bear might not be far away, we persevered in the search; and, as likely spots to shelter him met our eye, we kept zig-zagging about the same knoll. At first we took a southerly course, but after a time wheeled about again; and though keeping rather lower down the eminence, we, in degree, retraced our footsteps.

Whilst cautiously looking around us, our expectations of seeing the bear constantly on the stretch, and my gun at the time being on the full-cock, I suddenly caught an indistinct glimpse of a large dark object amongst the trees on the rising ground above us. It was at a distance, as it seemed to me through the sleet and mist, of a good gun-shot; and though stationary, so to say, it moved. Not doubting that it was the bear, I, in almost the twinkling

of an eye, raised and discharged my gun, when the object at which I aimed at once sunk to the ground. Though Elg and the soldier were standing immediately behind me, neither of them saw it. But this was not to be wondered at, as, owing to the denseness of the cover, it was only from time to time that even a transient view could be obtained of anything in the distance.

Almost at the instant of firing, and at the very spot to which my aim was directed, the dog became visible, and began to bark loudly; on seeing which I cried out in great alarm: "Elg! is it possible? can I have shot my dog?" But observing by the way in which the animal pulled at his tether, that he was uninjured, and recollecting that he was with Svensson, the truth flashed at once across my mind, and I exclaimed: "It is Svensson and not the dog that is killed!" And such was the dreadful fact!—On proceeding to the spot, there lay the poor fellow stretched at his length, and stone dead! It was a piteous sight to look on: a grey-headed old man — he was then in his sixty-fifth year—thus weltering in his own blood; and to me a doubly heart-rending spectacle, as it was my own hand that had sped the fatal bullet. We were all horror-stricken. For my part, what with reflecting on myself for having been the cause of the calamity, and grief for the loss of an old and tried comrade, my feelings are not to be conveyed by words.

Indeed we were utterly confounded, as well as horrified; for after the very strict injunctions given to the poor man, it was quite incomprehensible to us how an old and experienced Chasseur, like him, could have ventured to leave his post. But, no doubt, he did so under the idea that we had searched

the knoll where he met his fate, and had subsequently gone elsewhere, and therefore considered there was no risk in following on our track.

Though it was the veriest snap-shot, my aim was unfortunately too true. One of the bullets—there being two in either barrel—had penetrated poor Svensson's head, just below the ear; the other had taken effect in the upper part of the left shoulder, and passed out beneath the right arm, which it had shattered in its progress. Death must, therefore, have been instantaneous; which circumstance, poor as was the solace, was some little alleviation to my mind.

When the old man received his death-wounds, he was engaged, as appeared by the marks at the stump of a tree, in lighting a fire. Had he been in an upright position, I should, no doubt, have looked twice before drawing the trigger: but whilst collecting sticks for fuel, his body was bent double, which made him more resemble a bear; and his stooping position, therefore, in all probability, caused his untimely and melancholy end.

How far the poor fellow was from me, is hard to say—to my notions, certainly not more than from sixty to seventy yards. This is, I think, borne out by the fact, that the balls—mere running ones, and without leather, or covering of any kind around them—took effect, as shown, within a very few inches of each other, which could hardly have been the case had the distance been much greater. Elg—as will be seen by the depositions subsequently taken—coincided with me in opinion in this matter; and in the first instance, so did the soldier; though he subsequently made out the distance to be very much greater.

Poor Svensson fell at about one hundred and fifty paces from the Hö-Hässja, where, at the moment the deadly shot was fired, we firmly believed him still to be, and at some fifty paces to the left of us, instead of one hundred or more to the right, as he would have been, had he remained stationary.

When we had somewhat recovered from the first shock of this dreadful accident, we bore our poor old companion to the sledge—an operation which was attended with some difficulty, as the ground in places was rugged and broken; and having laid the corpse in the vehicle, and covered it with a cloak, we slowly and sorrowfully wended our way back to Ytter-Malung, the hamlet from which we had started in the morning; but how different were our feelings and reflections! Then we were all life and animation, but now a band of mourners. Dissolution is at all times awful; but when the grim tyrant comes upon us altogether unexpectedly, it is doubly so. Truly was it written, "In the midst of life we are in death." Such an end too for a man who, though desperately wounded in two instances, had escaped with life in innumerable conflicts with bears;—to be mistaken for a wild beast, and deliberately shot down as such by a companion! Had he been killed by a bear, I should have looked on the event with comparative composure, for, according to the old proverb, he who plays with edged tools must expect to cut his fingers; but as it was, the calamity presented not a single point of solace or mitigation.

On reaching Ytter-Malung, where the dead body was deposited, the soldier Atter was dispatched in a sledge to the authorities, to inform them of what had happened;

whilst Elg and myself proceeded to Öfver-Malung, where M. Godenius, the rector of the parish, gave me a most kind reception, and to the best of his power comforted me under my heavy affliction.

A day or two afterwards there was a formal investigation of the affair, and the needful depositions were taken. The body of Svensson was also subjected to a *post-mortem* examination, as is usual in such cases.

On the 20th of February the trial took place before the *Härads-Rätt*, a Provincial Court, so to say. My own account of the catastrophe, in substance what I have stated, was given *vivâ voce*. Elg and the soldier handed to the Court their written depositions, of which a copy is annexed.

"We, the undersigned, accompanied the Englishman, Mr. Lloyd, on the 15th instant, between Tyngberget and Näsån, in the parish of Malung, to search for a bear which was there ringed; and we had in our company for the same purpose Jan Svensson, of Roskknölen, in the same parish. When we came to a Hö-Hässja, situated at the foot of a *Bergås* (or lesser hill), which was only separated from the Ring by a small morass, Mr. Lloyd directed Svensson to remain there with the dog, whilst we and the Englishman should go into the Ring, to see if there was any bear; and Svensson *was expressly ordered by Mr. Lloyd to remain on the spot until he heard shouts or a shot*, in which case he was instantly to release the dog. When we came a little distance within the Ring, we found where the bear had been burrowing; and after searching thereabouts for a time, we made a little circuit, and then returned to nearly the same spot. Mr. Lloyd now caught sight of something black amongst the bushes, on the hill-

side above us, at a distance of forty to fifty paces, which, as we supposed, he took to be the bear, and at which he discharged his gun. At the same moment, and in the direction he had fired, Mr. Lloyd's dog appeared; on which he said: 'Elg! surely I have not shot my dog!' And afterwards, when he saw the dog unhurt, and as he knew to a certainty that the dog and Svensson were together, he exclaimed: 'I fear I have shot Svensson!' On this we hastened up the hill, and found Svensson lying shot and dead. This was within the Ring, and one hundred and forty-five paces from the place where he had been ordered to remain. Svensson had stood in a *stooping posture*, engaged in lighting a fire, as was apparent by the marks on the ground. When Mr. Lloyd fired the shot, Svensson was about fifty paces to the *left* of us, instead of one hundred paces to the *right*, as he would have been had he remained at the Hö-Hässja, where we had parted from him a quarter of an hour before, and where we to a certainty believed him still to be. The Ring was in the wildest part of the forest, and six to seven miles from the nearest habitation, No mere mortal could therefore by possibility have imagined, or could have had a presentiment, that any human being, excepting ourselves, could have been found in so remote a place."

Subsequent to the above depositions being read, both men were interrogated by the Court. Elg did not vary in any material degree in his evidence; but he went into more details as to our proceedings whilst in the Ring, &c. Neither did Atter vary in his testimony, excepting as to the distance Svensson was from me when the fatal shot was fired;

which, instead of forty or fifty paces, as he and Elg had deposed to, he now asserted to be one hundred and fifty paces; and this was, he said, from actual measurement, he having been over the ground for the express purpose, only a day or two before the trial. As he admitted, however, that the ground was very undulating, and strewed with boulders, and that his steps were very short, it was thought he might be somewhat mistaken in the matter. At least, so I judged, from the Court not seeming to lay much stress on the discrepancy in his testimony.

On the trial, M. Falk most kindly lent me his countenance and support; and his evidence, which though not given on oath, was allowed to be embodied in the proceedings, had without doubt great weight in the decision of the Court. His testimony, which I give *verbatim*, was as follows:

"What I, after reading the evidence of Henrik Elg and the soldier Atter; what I, by word of mouth have learnt from those who were present at Svensson's death, whose relations of the accident most fully agree in all particulars; as also, from what I, from my many years experience in bear hunting, can clearly and truly judge of the matter is this, that Svensson, by disobeying the commands of his superior, Mr. Lloyd, which were that he should stand still at a specified spot, and there await a signal or orders, for his farther proceedings, has been the occasion of his own death. To me, or to any one else, the like could easily have happened, and would have happened to me, had I been in Mr. Lloyd's place. I consider Svensson to have been equally blameable in this matter, as he who without permission goes

within the Skall-plats, and is accidentally killed, for which no one would be responsible. I have during twenty-five years known Svensson, and looked upon him—and that with good reason—as a skilful bear hunter. What, therefore, could have induced him to act contrary to a direct command, and to commit so great an imprudence, is to me incomprehensible. That Mr. Lloyd, who always had very great confidence in his old and well-tried forest friend, never could have supposed, or even have thought it possible, that Svensson was gone into the Ring, and especially to that part of it where he himself had said the bear must be, is clear and manifest—as it also is, that Mr. Lloyd never could have supposed it possible to meet a human being in a wilderness, a (Swedish) mile from a dwelling; and consequently could not but take a dark, stooping, and moving object for the bear, which was said to be lying there. These my opinions and convictions I will strengthen with my oath when required."

Subjoined is the decision of the Härads-Rätt, dated 18th of March, 1835, respecting this unhappy affair.

"Whereas, from what the witnesses Elg and Atter have jointly deposed to on oath, it appears that they, in company with Lloyd and Svensson, proceeded on the 15th of last January, in the forenoon, to a part of the forest situated between Tyngberget and Näsån, in the parish of Malung, to shoot a ringed bear; that Svensson was stationed by Lloyd at some little distance to the east of the Ring, where he was strictly ordered to remain until he heard shouts or a shot, when he was to slip Lloyd's dog, which he had with him in couplings. Lloyd, Elg, and Atter then entered the

Ring on its eastern side, and proceeded to a knoll (*Ås*), where Svensson had previously said the bear must lie, if he was within the circle. But when they found a place where the beast had burrowed, and that he was gone elsewhere, they proceeded to the more southern part of the Ring. Subsequently they diverged a little to the eastward, and then returned north again. Shortly afterwards, and about ten or fifteen minutes from the time they first entered the Ring, Lloyd pointed his gun toward the aforesaid knoll, which lay in a north-westerly direction, and fired, though without Elg or Atter—owing to the thickness of the intervening wood—being able to discern the object at which he aimed. But subsequently they ascertained that Svensson was hit by the shot, and killed; and that at a distance of one hundred and forty-five paces from the spot where he had been stationed at the commencement of the hunt, and where he had been expressly ordered to remain. For this reason, and because at the time it was not to be imagined that any person could be on the aforesaid knoll, much less Svensson, after he himself had said that the bear must be lying there, if he was within the Ring; and as, besides, the spot where the occurrence took place was within a district where shooting was allowed, the Härads-Rätt considers that Svensson was killed by *accident*, on the part of Lloyd, and that the case must therefore come under Chap. 29, § 2, of the Criminal Code (*Missgernings Balken*), which enacts, &c., &c."

Though subjected to a trifling fine, in the shape of a deodand, the effect of this judgment was a full and honourable acquittal.

But unfortunately the matter did not rest here. In all

criminal cases—as also in civil cases, if the parties be dissatisfied and appeal—the decision of the Härads-Rätt goes up to the *Hof-Rätt*, a Superior Court, for confirmation or reversal, as the case may be. In my instance unhappily it was reversed, and for the reasons subjoined.

After recapitulating the proceedings before the Härads-Rätt, the Hof-Rätt thus expresses itself: "From this it clearly appears, and that upon sufficient grounds, that Lloyd did not shoot Svensson with intent and design; as also that Lloyd had no reason to suppose Svensson, prior to the signal agreed upon, would have left his appointed station at the outside of the Ring, much less that he should have proceeded to the very spot within the Ring pointed out by him as that where he believed the bear to lie; or that there could be any human being besides himself (Lloyd) and companions in the wild and distant forest where the hunt took place. As Lloyd, nevertheless, admits that he could not clearly distinguish the object at which he fired, and as the proceedings before the Härads-Rätt do not show whether the colour of the clothes worn on the occasion by Svensson, or his position at the moment of the shot at a distance of fifty paces, more or less, likened a bear, his case cannot be applicable to Chap. 29, § 2, of the Criminal Code (M. B.), to which he has been made amenable by the Härads-Rätt, for that has only reference to *casual accidents*, such as shooting at an animal, and some one being killed in consequence, or that a ball rebounds, and a death ensues; for Lloyd, on the contrary, aimed at the very object that was struck by the ball, and thus, through carelessness, was the cause of Svensson's death. The Hof-Rätt therefore reverses the decision of the Härads-

Rätt, and agreeably to Chap. 28, § 1, of the Criminal Code (M. B.), condemns Lloyd to the penalty of *half mans-bot*,* &c."

This decision not only entailed on me a considerable pecuniary fine, but subjected me to do penance in the church. On the ground, however, of my professing another religion than the Lutheran, the Court exempted me from the Cutty-stool.

Feeling myself perfectly blameless in the unfortunate matter, and that the judgment of the Hof-Rätt was inequitable, I therefore appealed to the King in Council—a course likewise open to every one in either criminal or civil cases—praying for a reversal of what I with reason considered a hard sentence. I was partly induced to take this step owing to the urgent entreaties of friends, one of whom, shortly after the accident, wrote me as follows:

"I have been excessively grieved by the calamity which has befallen you, and all our countrymen to whom I have spoken on the subject, sympathise with you most feelingly on the unfortunate occasion. That *we* are all perfectly convinced that you are quite blameless, it is almost superfluous to mention; but I earnestly entreat you, nevertheless, not to slacken in your endeavours to make your *innocence as clear as noon-day*; for it is a sad censorious country we live

* This penalty, which literally rendered means *penance for half a man*, and which, in degree at least, answers to our deodand, carries with it a pecuniary fine of, I believe, about £4 sterling. It is inflicted in such cases of homicide in which the Court, as in my instance, acquits the prisoner of design, but deems him to have been guilty of carelessness.

The penalty of *hel mans-bot*—or penance for a whole man—is inflicted in more culpable cases of homicide, and, as the words would imply, carries with it a double fine.

in, and we all have our enemies, you amongst the rest—for no other reason perhaps, than that you are a better shot than all other sportsmen. I again entreat you to leave no exertion unspared to come with an unsullied reputation out of this painful situation."

The substance of my memorial to the King was as follows:

"To the King, &c.,

"With the greatest astonishment and regret I have just learnt that the Hof-Rätt has reversed the decision of the Härads-Rätt, on the ground that, owing to carelessness, I caused the death of Jan Svensson of Roskknölen, on the 15th of January of this year, and that it has condemned me, agreeably to Chap. 28, § 1, of the Criminal Code (M. B.), to half mans-bot exempting me, however, from doing penance in the church in consequence of my professing another religion.

"Not having made myself amenable to this degrading punishment, the consciousness of my perfect innocence in the matter necessitates me humbly to submit my case to the decision of your Majesty, trusting that you will be pleased to annul the sentence of the Hof-Rätt, and thus restore me my good name.

"Although the Hof-Rätt, as well as the Härads-Rätt, considered it fully proved that it was entirely without intent or design on my part that Svensson was killed, the Hof-Rätt has nevertheless drawn its special attention as well to the circumstance of my not clearly distinguishing, before firing, what the object aimed at actually was, as that the proceedings before the Härads-Rätt did not make it appear

whether Svensson, in regard to the colour of his clothes, and the position of his body at the moment of the shot, more or less likened the beast for which the hunt was got up.

"In respect to the first point—my shooting at an undefined object—I trust that your Majesty will be satisfied that, under the circumstances, I was not to blame; for catching sight of a dark mass just where Svensson had said the bear ought to be, and knowing that my companions Atter and Elg were in safety, and presuming Svensson to be where I had posted him, which was in an altogether different direction, I could not well do otherwise than fire.

"And in regard to the second point—the colour of Svensson's dress, and his attitude when killed—if your Majesty is not satisfied with my assurance as to his wearing on the unfortunate occasion a dark, nearly black, coat, and that his body was bent and in motion, whereby at a long distance he altogether resembled a bear, I beseech that the witnesses, Elg and Atter, may be re-examined as to these particulars.

"That the Hof-Rätt, under the unfortunate and afflictive circumstances, should be of opinion that the case is only referable to Chap. 28, § 1, of the Criminal Code (M. B.), is to me, and with reason, quite surprising. It has been proved beyond dispute before the Härads-Rätt, by M. Falk and the other witnesses, that the forest where the accident happened, and which is commonly called Tio-Mil Skog, is a wilderness in every sense of the word, for miles together without an inhabitant, where, excepting on very extraordinary occasions, people are never to be found. But on this point the Hof-Rätt, I humbly submit, has not laid

that stress of which it is surely deserving, and I therefore trust that the only penalty to which I can be subjected for the casual accident which has happened, will be that already adjudged by the Härads-Rätt, agreeably to Chap. 29, § 2, of the Criminal Code (M. B.), as the cases therein stated are quite analogous to mine—namely, 'a man firing a gun in a place where shooting is lawful, and where it is not supposed people are to be found.'

"Whoever has taken part in bear hunting will willingly coincide in the views of M. Falk, which are grounded on many years' experience—namely, that when in attacking a bear, even should only a glimpse of the beast be visible, not a moment is left for consideration; as also that to avoid unnecessarily risking life, the greatest attention to orders, the most rigid discipline and rapid decision in action, are of the first moment to the parties engaged. With these impressions, and fully convinced that on the occasion in question, my old and faithful comrade, Svensson, would be obedient to my instructions, I directed him, as shown by the witnesses, to *remain at a particular spot outside of the Ring until farther orders.* Knowing where he was, had I from carelessness shot him at his post, I should naturally have subjected myself to the most severe punishment. But as when I fired my gun, it was in an opposite direction to where I had left him a little before, and just at the spot he himself had pointed out as the most probable for the bear to be lying, and this with the full impression that the object aimed at was the animal of which we were in search, it seems to me that the decision of the Hof-Rätt in the matter exceeds the bounds of moderation, and is in direct opposition to the annexed judgment passed on Zacharias Jonsson, the

8th of October, 1757, who was indicted for having caused a man's death in a manner somewhat similar to myself."

In due time came his Majesty's decision. It was short, but to the purpose; for after recapitulating the proceedings of the lower courts, it reversed the judgment of the Hof-Rätt, and confirmed that of the Härads-Rätt, which, as observed, was—in point of fact an acquittal, and exempted me from all blame in this most melancholy affair.

Whilst this unhappy business was pending, a kindly feeling prevailed generally towards me amongst the Swedes. The peasants in Dalecarlia, where the catastrophe occurred, viewed the matter in its true light—as one of those accidents to which people engaged in so hazardous a pursuit as bear hunting are constantly exposed; and so far from showing ill-will, evinced towards me, as well during the trial as afterwards, the greatest cordiality.

And our countrymen resident in Sweden sympathised with me most kindly on the melancholy occasion. The present Lord Bloomfield, our then *chargé d'affaires,* amongst others, wrote me a very kind note from Stockholm; and in a second note, written subsequently to the decision of the King, he says: "I congratulate you on the issue of your trial, which is in every way as satisfactory as one could have expected. The same feeling on the subject continues here, and people will be glad to learn that you are so completely exculpated."

CHAPTER XXI.

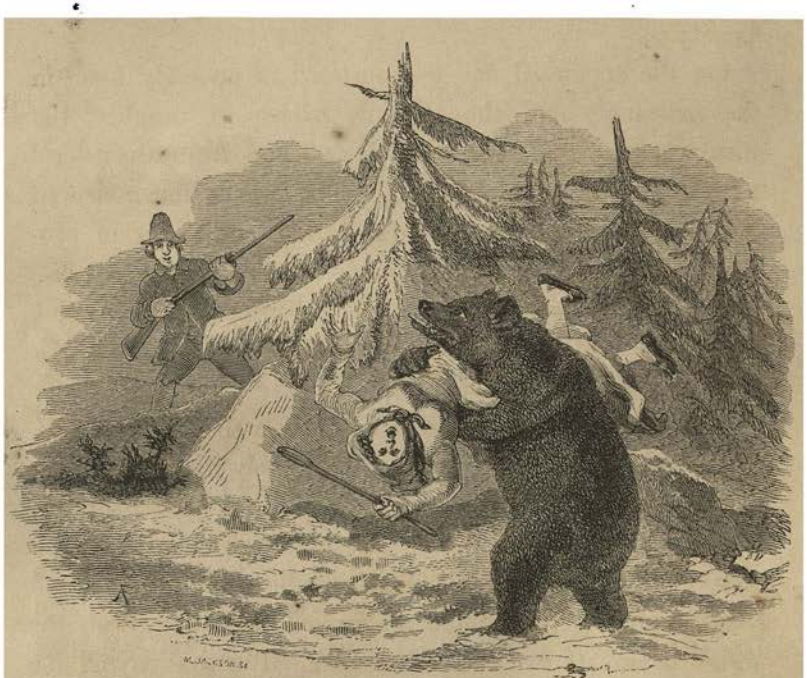
THE BEAR AND THE SHEPHERDESS—CHASE AND DEATH OF A BEAR—THE BEAST WHEN FROZEN—RINGING HARES—THE NORTHERN FORESTS—THE SHEALING—DEATH OF THREE BEARS—DALECARLIAN CHASSEURS—THE ELK AND THE WOLF—RECOVERY AND DEATH OF A LOST BEAR.

DURING my several trips to Wermeland, I was in at the death of a good many bears: a portion were killed in Skalls, but for the most part I shot them when, so to say, alone. At times I was pretty successful—that is, for Scandinavia, where, however, there is not one bear, so I take it, to fifty in the back woods of America.

The winter of 1838-9 was one of my best seasons. In the early part of it, and by the aid of a *Knäpt-Skall*, I had killed two bears (roused by myself) within a few miles of Ronnum; but not being able to get others on foot, and as the winter was wearing away, it then being the middle of February, I proceeded with a brace of tolerable dogs into Wermeland, in the hopes that fortune might there prove more propitious.

On reaching that province, however, I could gain no

certain intelligence of bears, and I therefore began to think my journey might prove a fruitless one. But as Elg, with whom I took up my abode at Brunberget, informed me that one of those beasts had during the past summer committed ravages thereabouts, and as it was generally believed he had his quarters hard by, we determined on using our best endeavours to rouse him from his lair.



THE BEAR AND THE SHEPHERDESS.

The better to effect this object we beat up for volunteers, promising a trifling gratuity in the event of success to those

taking part in the Chasse. But under any circumstances the peasants were ready to aid us, as well for the reason that the bear in question was an inconvenient neighbour, as that they owed him a special grudge, he having, during the preceding summer, severely maltreated a poor young woman — as somewhat humorously depicted by M. von Dardel—who, in her courageous endeavours to protect some cattle under her charge, had indeed nearly fallen a victim to the beast's ferocity.

On the appointed day we mustered at an early hour in the morning; and though only twelve in number, the men were for the most part Finnar, and from their local knowledge, &c., twice as valuable therefore as inexperienced hands. Every one was provided with a sufficiency of provisions to pass a couple of nights in the forest, as likewise with Skidor, which indeed were indispensable: the snow being deep and loose, we should otherwise have sunk to the knee, or beyond it, at every step.

The bear was supposed to be couched in the face of a lofty hill called the *Fjäll*, so designated probably from its summit being divested, or nearly so, of wood of any kind—a rather unusual circumstance in this part of Sweden; whence it is a sort of landmark for all the surrounding country.

On reaching the ground we formed line, and beat the forest before us in the usual manner. But that day all our efforts to find the beast proved fruitless.

At dusk, therefore, we prepared a bivouac in the manner mentioned in my former work. The weather was fine, and not too cold; and having a magnificent watch-fire, as also an abundance of good things on which to regale ourselves, we were enabled to pass the night with tolerable comfort.

On the succeeding morning the search was resumed, though with no better success; but in the afternoon, having in the interim gone over much ground, and when in a manner retracing our steps, we came upon the Spår of a large bear—of that no doubt of which we were in search. But the tracks were not very recent, from which we inferred, as was the fact, that owing to the noise made by ourselves either at the bivouac, or whilst traversing the forest during the preceding day, the beast had taken alarm and quitted his den.

Desirous of ascertaining from whence he came, we in all silence followed his *Bak-spår*—literally his back-track; but had not proceeded very far, when all at once the beast bolted from beneath the root of a prostrate pine, and as it proved, from the very lair that he had occupied in the first instance. This surprised us greatly; for after a bear—an old one at least—has been once disturbed, he very rarely returns to his original bed. It appeared that, after turning out, he had made a little *détour* through the forest, when finding all safe, he had once more gone back to his old quarters, where, had he remained, it is probable he would have escaped us altogether.

The dogs, which, whilst we were following the Spår, had been coupled, were now slipped, and chase was given. But owing to the denseness of the cover, the broken and precipitous nature of the ground, and the looseness of the snow, we could not come up with the beast. So after the chase had continued for an hour or more, and the shades of evening had set in, we gave it up, and retraced our steps to Brunberget.

At an early hour on the following morning, however, Elg

and myself, with the dogs in company, renewed the pursuit of the bear; and now that a long day was before us, we anticipated an easy victory. But we were quite out in our reckoning; for though we chased the beast for many hours, and over a great tract of country, we were never enabled to come up with him; we only viewed him, indeed, in two instances, and then in the distance.

On the Fjäll the snow lay deep, and could we have kept the bear there, his career would probably soon have been ended; but finding himself hard pressed, he fell down to the lower grounds, where there was comparatively little snow, and then we were quickly distanced.

Towards evening, seeing that the bear, which had then crossed the river Halgå, to the westward of Brunberget, had the decided advantage of us, we gave up the chase as hopeless; and wearied and dispirited, slowly wended our way homewards.

In the course of the two following days Elg, however, succeeded in ringing the bear, though at a distance of ten to twelve miles from the spot where he had been originally started. But owing to bad weather, and to the very devious course the beast had taken, this had been of very difficult accomplishment.

Here we allowed him to remain undisturbed for several days, during which time a good deal of snow fell; when, thinking there was a probability of success, another attack was determined upon.

The Finnish hamlet of Näsberget being much nearer to the bear than Brunberget, we proceeded there over night, and at an early hour on the following morning started for the Ring, then at only three to four miles' distance.

Though the bear's Spår was partially obliterated by the recent snow-storm, still with care and attention it was to be made out; and as we thought there was a probability of our being enabled to steal upon him whilst in his lair, we made the attempt on foot; but though every precaution was adopted, he bolted, unseen by us, before we could reach his bed.

Resuming the Skidor, of which we had divested ourselves on entering the Ring, that our movements might be carried on the more silently, we forthwith gave chase. But the snow, which in many places must have been near three feet deep, was, from its looseness, in a very unfavourable state for Skidor, and we had therefore literally to plough our way through it. The dogs were still worse off than ourselves; for instead of being in advance, as they ought to have been, they were usually in our wake, and oftentimes, too, at a most respectable distance. Had the bear, nevertheless, held anything like a straight course, and to the more open parts of the forest, we should probably soon have closed with him; but on the contrary, and as if aware of the advantage it gave him over us, he pursued a most devious course, and kept to the closest thickets.

More than an hour elapsed, therefore, before we viewed the beast, which was in a rather open part of the forest, and at a distance of eighty to ninety paces. Halting on the instant, and slipping my gun out of its case, I immediately fired both barrels at his hind-quarters—the only part exposed—and apparently with some effect, as for a few seconds he floundered greatly in the snow; though it is very possible his undulatory motions arose rather from panic than from

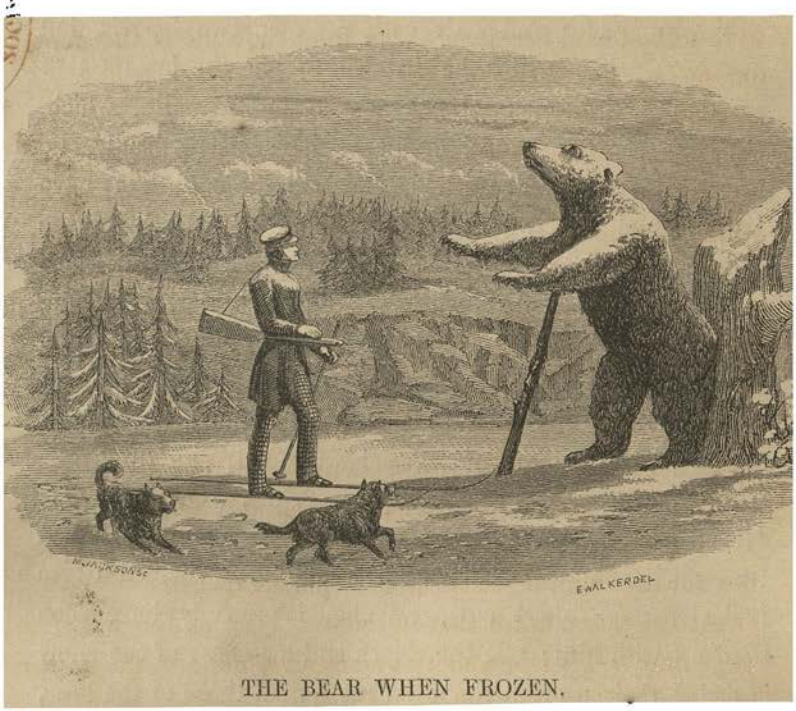
wounds. Be that as it may, he continued to retreat, and was quickly lost to view amongst the trees.

When reloaded, the chase was renewed with fresh vigour, and shortly afterwards we again sighted the bear, looking as he always does when wading through deep snow, and when seen from behind, much like a huge ambulatory feather-bed. This time we were close upon the beast, and I forthwith saluted him, not only with my own two barrels, but with Elg's rifle, which he handed to me the instant that my gun was discharged. On receiving my fire, which, from the short distance, ought to have been deadly, he turned with a savage growl, and would doubtless have charged, had not wounds, fatigue, and the depth of the snow paralyzed his movements. Fortunately for us, perhaps, he was satisfied with making this demonstration, and before we were reloaded, had again plunged into the brake.

From this time forward the bear confined himself, if possible, to still more untraversable ground, and to denser cover than before, so that our progress was somewhat slow. Nevertheless, had the dogs been able to close with the beast (in which case their challenges would have enabled us to make many a short cut), we should probably have soon been up with him; but the depth and looseness of the snow impeded their movements even more than those of the bear, so that they were commonly far in the rear, and consequently utterly useless to us.

At length, however, we came up with him in a thicket; and when at some thirty paces' distance, and crossing us, a bullet that I put through his heart brought him stone-dead to the ground.

Our prize proved a large male. Being desirous of having him conveyed whole from the forest—and this was then an impossibility—we therefore, after distending his limbs, and covering the carcase over with Gran-ris, left him where he fell; when, well satisfied with the result of the Chasse, we slowly bent our steps homewards.



THE BEAR WHEN FROZEN.

Two days subsequently, the beast, by the aid of a sledge, was conveyed to Brunberget; and the weather having been severe in the interim, he was then frozen into a solid mass. In this state I caused him to be placed on his hind legs, with a stick in front, to prevent his toppling over; in

which posture—standing, as he did, upwards of seven feet* in height—he presented, as seen in the above sketch, a most formidable appearance.

Being unable to obtain intelligence of other bears, Elg and myself amused ourselves during the succeeding few days in the pursuit of feathered game—such as the Capercali, the Black Cock, and the Ripa (a species of grouse), all of which were to be found hereabouts; but from the state of the snow, our success was not very great.

We also picked up a Hare or two, of which there were a good many. We were accustomed to ring them in the first instance, and then to follow on their Spår, and shoot them either on their seats, or subsequently when on foot. After a recent fall of snow it is specially easy to ring a hare, as well for the reason that he then seldom goes any distance from his form, as that all his old tracks, which are numerous, and apt to bewilder, are obliterated. This kind of sport, with a rifle at least, is not uninteresting.

In these our rambles, we occasionally saw the tracks both of the Lynx and the Glutton; but from my dogs not being trained to those beasts, which is very needful to insure success, we did not think it worth while to pursue them.

At length we heard that in the early part of the winter a large bear had been on foot at some sixty miles to the north-east, and a good deal hunted, as well as somewhat wounded; but that owing to a heavy fall of snow, his tracks were

* To some the height specified may seem exaggeration; but out of curiosity I recently, with the assistance of the keepers, took the dimensions of the large brown bear now in the Zoological Gardens, which were as follows: height of shoulder, stick measurement, three feet eleven inches; height when upright, from heel to crown, seven feet five inches; and height, when standing on tip-toe, to point of nose, eight feet eleven inches.

obliterated, and farther pursuit in consequence discontinued. Rumour said, however, that in the opinion of the men engaged in the hunt, the beast might, with good dogs, still be recovered; for though not actually ringed, a strong suspicion was entertained as to his whereabouts. Under these circumstances, we determined on trying our fortune.

Leaving my pony and sledge, which I had brought all the way from Wenersborg (a distance of upwards of two hundred miles), at Brunberget, Elg and I, with the dogs, started one morning on Skidor for Öfver-Malung, in Western Dalecarlia. Our joint baggage, consisting only of absolute necessaries, was packed in a small kit,* which Elg bore on his shoulders.

Our route lay through the Tio-Mil-Skog, of which mention was recently made: as wild a tract of country as is to be met with in Scandinavia—though from being undulated and studded with fine lakes, by no means deficient in the picturesque. Neither man nor habitation was to be seen, and a gloomy silence reigned around. Owing to the distance from navigable rivers, the woodman's axe seldom resounds in these solitudes. Not an inconsiderable portion of the trees, indeed, were in a state of partial decay, and their naked stems and branches gave the forest a very desolate and primeval appearance.

Though nearer thirty than twenty miles to Malung, yet from the snow being in pretty good order, we accomplished

* That of our noble soldiers, even when in light marching order, weighs, I believe, forty or fifty pounds. In the northern forests I never yet saw the man, however powerful he might be, that could perform his duty properly if his kit weighed even twenty pounds. But it is to be hoped this most crying evil will shortly be remedied, in part at least.

the distance long before the close of the day. From this place we proceeded by the way of Öje, remarkable for its splendid lake, studded with innumerable and beautiful islands, to —— glass works, situated at the southern extremity of the Wenjan, one of the largest sheets of water in this part of Sweden; and from hence to the hamlet of Gafunda, five or six miles beyond

Here we met the men who had chased the bear, in search of which we had come so far, and from them obtained the needful information as to his supposed locale. They told us, moreover, that two Chasseurs—one of them at least of some celebrity—from the more northern parts of Western Dalecarlia, had been attracted by rumours like to those that had reached us; but that after devoting several days to the search, they had given it up in disgust, and gone elsewhere. This did not tend to brighten the prospect; but as we had dogs, with which these men were unprovided, our resolve remained unchanged.

Elg and I therefore proceeded to an uninhabited Shealing situated in the wilds of the forest a few miles to the eastward of Gafunda, and near to the spot indicated by the men, where, that our search might be more complete, we purposed remaining a few days. Previous to starting, however, we sent forward a few of the simple necessaries of life—such as bread, potatoes, &c.; for beyond pots and pans, nothing at this season of the year was to be found in the hut. But though our stock of provisions was scanty in quantity, and plain in quality, we anticipated that, as on previous occasions, our guns would occasionally "re-inforce the larder."

We made the Shealing in question our head-quarters for several days, during which we beat not only the suspected

ground, but much of the surrounding forest. For a time, however, our search proved unsuccessful, for we neither found the bear, nor saw any marks leading us to suppose he might be lying in the vicinity; but this was the less to be wondered at, for the snow was in many places full four feet deep, and the trees besides smothered with it.

At length one morning, when several miles to the eastward of the Shealing, and whilst traversing an exceedingly desolate part of the forest, Elg suddenly halted and drew my attention to a pine growing on a little knoll hard by, the stem of which was scored in every direction. These scores proved, on closer inspection, to be the handiwork of a bear; and as they did not date longer back than the past autumn, we inferred that the beast was not far distant.

Near to the foot of this tree was a small aperture in the snow, but so blocked up as hardly to be perceptible at a little distance. Having enlarged this aperture with our Skidor sticks, we quickly became convinced a bear was the excavator; but as on probing it to the bottom (and it was deep), nothing stirred, we were sceptical as to its being tenanted. On this point, however, our doubts were presently removed, for the dogs, which had been ranging at a distance, coming up, commenced baying furiously.

We immediately prepared for action. Both Elg and I laid aside our Skidor, when stationing myself in the rear of the aperture, armed not only with my own gun but Elg's, I directed the man to procure a long stake, with which to stir up the bear from his passing sound repose. But the beast having ensconced himself in an inner chamber, of which, in the first instance, we were not aware, Elg's efforts to dislodge him (standing as he did, for his personal security,

somewhat in the rear of the hole) were in the first instance altogether ineffectual. Neither did the bear, by growl, or other angry demonstration, intimate his presence.

Becoming somewhat tired of this child's play, Elg at length advanced to the front of the hole, apparently in considerable ire (so at least it was to be inferred from his ejaculation, "Tjugu Tusen Djeflar!"—which literally interpreted, means twenty thousand devils), when directing the stake slantingly, so as to reach the aforesaid chamber, out immediately rushed not only one bear, but three—the mother, and her two well-grown cubs—and that, moreover, like so many projectiles from Perkins's steam-gun. I fired on the instant, and the old bear fell dead. One of the cubs went off unscathed, the other badly wounded.

Reloading and resuming our Skidor, we gave chase to the wounded cub, with which, from its being hard pressed by the dogs, we soon came up, when a bullet quickly put a period to its miseries.

But the other cub gave us somewhat more trouble; for it being mid-day, and the temperature somewhat mild, the snow became *kräm*,* and fastened to the Skidor, so that our progress was greatly retarded. A shot, however, fired somewhat at random, taking effect in its leg, at length partially disabled the beast. On attempting to reload, ammunition was wanting, my spare powder-horn having been left with the kit, which, to facilitate his movements, Elg had left on the knoll. Had it been a large bear of which we were in chase, here was a predicament to be placed in! But in this instance the loss of my powder-horn was attended

* *Kräm* (probably from the word *krama*, to squeeze) signifies that the snow is no longer in a grainy state, but has become adhesive—squeezable into a snowball, for instance

with no inconvenience; for failing a better weapon, I ran in upon the beast, and destroyed it with my Skidor-stick.

We now retraced our steps to the knoll, Elg bearing on his shoulder the last trophy; and being provided with knives, set to work in skinning and quartering the bears. When this operation was accomplished, a sort of stand was erected between two trees, some feet from the ground, on which the skins and severed limbs of the beasts were deposited, and afterwards covered over with Gran-ris, as a protection from falling weather.

Whilst thus occupied, we were unexpectedly joined by the Dalecarlian Chasseurs recently spoken of. Like us, they were on the prowl; and having fallen in with our tracks, and hearing the shots in the distance, wished to see what we were about, and perchance to share in the spoil.

These men stood in the relative position of father and son. The father was an old soldier, glorying in the name of *Sjunger*, or the vocalist—or such rather was his military cognomen;* but being somewhat advanced in years, on him devolved the single duty of carrying the "prog"—no light task either, when one considers the enormous appetite usually possessed by brother Nimrods.

Eric, the son, was the mighty hunter. On his shoulder hung the fatal rifle. It was a most formidable-looking

* Few of the Swedish peasants have surnames, and in consequence their children simply take their father's Christian name in addition to their own: for example, if the father's name be Sven Larsson, his sons', in consequence, would be Jan or Nils Svens-son; and his daughters', Maria or Eliza Svens-daughter. The confusion that this system creates would be endless, were it not that in all matters of business, the residence of the party is usually attached to his name. In the army, and to prevent the confusion that would otherwise arise, the common soldiers therefore are designated by fictitious (generally monosyllabic) names; as, for instance, names of birds, beasts, trees, &c.

weapon, weighing certainly thirteen or fourteen pounds. To believe the owner, Captain Warner's "long range" was nothing to it. With bears, Eric had come but little in contact; but his exploits with elks, of which he narrated many, were much talked of in that part of the country.

A short time prior to our meeting, these men had fallen in with the somewhat stale tracks of what they at first considered to be two elks—the mother and fawn. These tracks they pursued for a time; but remarking at length that that of the supposed fawn seldom followed in the dam's, but kept parallel with it, they were induced to examine the tracks more closely, when they ascertained that it was a wolf, and not its own young, that had kept company with the poor elk. Farther pursuit now seemed useless, it being easy to divine the fate of the deer. Thinking it better to come in for the jackal's share than none at all, our friends, however, persevered; and though after reaching the carcase they found, as anticipated, much of the flesh devoured by the wolf, still venison enough remained (of some of which indeed Elg and I also partook) to compensate them for their toil.

Poor Eric! The very same winter that I myself, as will presently be related, was mauled by a bear, he also was severely wounded by one of those beasts. In the northern forests, when the winter quarters of a bear are ascertained, and that he is about to be attacked, it is often customary to have a sledge at hand, in order to bring home his carcase. Eric and his comrades, of whom, on this occasion, he had several, being all confidence, this was the arrangement in the present instance. And it was well timed, for the vehicle served to convey from the forest the bear and his antagonist side by side: the bear dead, and poor Eric nearly so! And though the man eventually recovered, he was disabled for

a long time afterwards, and to this day suffers, I am told, from his wounds.

To return. As it suited the views of our new friends, as well as our own, we agreed to join company. So after we had all feasted on the more delicate parts of the bears, we started off again in search of fresh adventures.

We with reason anticipated sport, for elks and bears were probably as plentiful hereabouts as in any part of Scandinavia. Very unfortunately for us, however, a regular thaw set in on the succeeding day, and the snow, in consequence, became in a miserable state for the Skidor. Owing chiefly to this circumstance, the Chasse proved a total failure; so after wandering over a large tract of desolate forest, between the great lakes Siljan and Wenjan, in which while we saw neither human being, nor other habitations than untenanted Shealings, and undergoing some hardship from fatigue, bivouacing under the bare heavens, and scanty fare, we faced homewards—the Dalecarlians for Gafunda, where they had taken up their temporary abode, and Elg and myself for our Shealing.

And we were glad to get back to it; for although we fared somewhat roughly here, our beds consisting merely of hay, still, as we were protected from the falling weather, to so much of which we had recently been exposed, we found ourselves, comparatively speaking, in clover. We were now well off also for provisions, our larder being amply provided with game of several kinds.

Though our efforts to recover the lost bear had hitherto proved unsuccessful, and though we entertained the faintest possible hopes of getting him on foot, we nevertheless determined, prior to departing from the hut, to give the suspected part of the forest another trial.

On the following morning, therefore, the search was

renewed. Near to the spot where the beast had last been seen, was a so-called *Vind-fälle*, or wind-fall—that is, the ground for a considerable space was thickly strewn with the trunks as well as the branches of innumerable pines, that had been prostrated by storms, or other causes. In some places the trees were piled one on another to a considerable height, which, coupled with the broken nature of the ground, rendered it at times difficult to proceed on Skidor; it would have been impracticable indeed, if the snow, which was here some four feet in depth, had not greatly tended to level the surface.

This Vind-fälle—and the like are very common throughout the northern forests—had been previously searched (though it is true, somewhat cursorily), not only by Eric and his father, but by ourselves. Nevertheless, we still thought it worth another trial; and we had not been long here, when one of the dogs, raising his head into the air, commenced baying deeply, and in a tone clearly evidencing that he had winded some noxious beast or other. At first the dog was at fault as to whence the taint proceeded; but in a short time he made out the den of the bear—the very beast of which we had so long been in search—which was situated beneath a mass of prostrate trees.

Calling to Elg, who at the time was at some distance on the hill-side above me, to come to my aid, I stationed myself immediately over the den. But though the dogs—for by this time the two had joined company—kept challenging furiously at its entrance, the bear would not quit his retreat. Finding this to be the case, I directed Elg to hand me his gun, and, as on a recent occasion, to turn out the beast with a stake.

This object was very quickly effected; for Bruin no sooner felt the pole at his posteriors, to which, through a chink amongst the logs, Elg had applied it with considerable unction, than out he bolted in double-quick time, and, to judge from appearances, in anything but an amiable mood. An instant afterwards—being then at only a few paces' distance—I fired both barrels, and severely wounded him in the neck and body. On receiving the bullets, he looked much inclined to charge; but the depth of the snow, and the attack of the dogs, which kept baying immediately about his hind-quarters, probably deterred him; and it was perhaps well that he did not, for stuck as my Skidor were amongst the logs, retreat was utterly impracticable.

The scene at this time was a rather striking one. It is pretty faithfully depicted in the accompanying illustration, from the pencil of Captain Thomas Wingate, late of the Queen's Royals, to whom I am also indebted for several other beautiful drawings in this work.

Dropping the discharged gun into the snow, and catching up Elg's rifle, which was lying in readiness at my feet, I attempted to fire; but though the cap duly exploded, the piece would not go off; neither did three or four other caps, placed on the nipple in rapid succession, succeed better. But at length the bear, which in the meanwhile had been gradually retreating, was lost to view amongst the trees.

To put the guns to rights was a work of time. My own was smothered with snow; and Elg's rifle, on examination, was found never to have been loaded—an omission on his part for which it was difficult to account—and it was one besides that might have cost us dear; for after my

T. Wingate del. E. Walker lith.

Day & Son, Lith^rs to The Queen

TURNING HIM OUT.

piece was discharged, we were without weapon of any sort or kind.

Both guns being at length in order, we went in pursuit of the bear; but the chase lasted a very short time, for what with loss of blood, and parrying the attacks of the dogs, his progress was slow, and we were soon enabled to approach within short range, when a bullet from my gun brought him lifeless to the ground.

Leaving Elg to skin the beast, which proved a male, and much wasted from the wounds he had received in the early part of the winter, I started on Skidor to procure a sledge on which to convey our hard-earned prize, as also the little baggage left at the Shealing, to Gafunda.

At this hamlet we remained two or three days, during which time the bears left *en cache* were brought from the forest, and their skins, by means of good fires, partially dried.

Afterwards Elg and I departed for our respective homes; and we had persevered quite long enough, for we were now pretty far in April, and the winter fairly at an end; the country, besides, from the sudden breaking up of the frost, and the consequent rapid dissolution of the snow, was partially inundated with water, from which cause travelling was not only exceedingly inconvenient, but in a degree dangerous.

CHAPTER XXII.

A GOOD DAY'S WORK.

PROVIDED the snow be in good order, great things may be accomplished with Skidor; and even when the snow is in a wretched state for those implements, I have at times been rather fortunate.

On one occasion, when returning from a successful Skall in the Wermeland Finn-forests—that portion of them lying to the westward of the river Clara—I learnt that some of our men had, in their way homewards, roused a she-bear and two large cubs. Several of the party being armed with guns, they fired at the beasts whilst retreating, and killed one of the cubs outright; but the old bear and the other cub succeeded in making their escape, though, as it was thought, not altogether unscathed.

I sent for the men engaged in this Chasse, and for a trifling consideration purchased their rights in the beasts.

The law in Sweden, it is true, does not give the title, yet custom fully recognises a bear to be the property of the man who first starts, or rather rings him, even should the beast in his wanderings traverse the half of the province.

There not being at this time more than a foot of snow upon the ground, and as in consequence it would have been idle attempting to run the bears down on Skidor, I deemed it best to wait awhile before attacking them, in the hope of a fresh fall of snow.

Directing Elg, therefore, to look after the beasts, I myself proceeded to Malung in Dalecarlia, in search of another bear, of which I had obtained some intelligence; and some ten days afterwards he rejoined me, and reported that he had succeeded in ringing both of our bears, though at six or seven miles apart.

In the course of the next few days a good deal of snow fell, and as no time was now to be lost, we set off on our return to Wermeland. At Forss, the first post-station beyond Malung, we diverged from the main road, and by the *Vinter-Väg*, or winter-route—which, as the name would imply, is only traversable at that season—we crossed the densely-wooded range of hills lying between the rivers Dal and Clara. But though we started pretty early in the day, and the distance was less than thirty miles, yet, from the snow being in an unfavourable state for sledging, it was several hours after dark before we fell down on the Clara. This was near to the post-house of Persby; and from thence, taking a southerly course, we proceeded to the hamlet of Amneryd, near to which the larger of the bears was ringed, and which we made our quarters for the night.

We had intended attacking the beasts on the following

morning, and for that purpose started at an early hour; but we had not gone far before the snow, from the mildness of the temperature, became kram, and adhered in masses to our Skidor; and what was nearly as great an inconvenience, the water dripped from the trees and bushes to that degree, as almost to liken a shower-bath. Under these discouraging circumstances, it was thought best to postpone the Chasse until a more favourable opportunity; and we therefore headed back to our temporary home, where we amused ourselves for the rest of the day as best we might.

Our detention within doors was luckily short; for during the succeeding night it froze sufficiently hard to prevent the snow from fastening to the Skidor, so that at the first break of day we were again off for the forest. To relieve Elg's shoulders, we, on this occasion, were accompanied by a peasant, who, together with our kit, containing a goodly supply of provisions, &c., bore an axe—a needful adjunct, as it was more than probable we should be necessitated to bivouac for one or more nights in the forest.

This man was equipped with *Skarbågar*, a very miserable substitute for Skidor. As said in "Northern Sports," they consist of frames of wicker-work, of a roundish or rather oval shape, about eighteen inches in length, and twelve in breadth; but to say nothing of their insufficiently answering the required purpose, they, owing to their very imperfect construction, are continually liable to get out of order. But Skarbågar are possessed of this advantage, that they are easily made and easily repaired. Horses even are, at times, provided with Skarbågar. These consist of circular iron rings, of about ten or twelve inches in diameter,

across which are several transverse bars of the same metal. They are fastened to the fetlock-joint with leathern thongs. Thus equipped, those animals necessarily straggle a little in their gait; but they are then enabled to traverse the forest in all directions.

The snow was now near three feet in depth; but as much of it had only recently fallen, it was loose, and in a rather indifferent state for the Skidor, which at every step sunk many inches below the surface. Our pace, as a consequence, was rather slow, though somewhat faster than that of the peasant, of whom we presently lost sight. The ground, moreover, was for the most part rising, and the forest thick and tangled, so that although the bear was lying at not more than six to seven miles from our quarters, it must have been upwards of two hours before we reached the Ring.

This embraced an extensive and very dense brake. As the beast had been so recently disturbed, there was little probability, even were we to attempt it, of being able to steal upon her in such close cover, and it was thought best, therefore, to start her at once, and take the chance of running her down. The dogs were accordingly uncoupled, when, winding her in the distance, they dashed into the thicket, and in a very few minutes, as they let us know by their challenges, she was on foot and away.

Fortunately the course of the bear was somewhat tortuous; so that, directed by the dogs, we were enabled to make sundry short cuts, and thereby gained on her rapidly. In a short time, indeed, we viewed her in the distance, and a few minutes afterwards had approached to within easy range, when my first barrel brought her to the ground, and the second terminated her existence.

Hitherto the snow had not fastened to our Skidor; but now that the day wore on, and the temperature became much milder, it began to adhere to these implements. It therefore became a question if we should not leave the other bear undisturbed until a more fitting occasion. Under the circumstances, it would perhaps have been the wiser plan; but as success had hitherto crowned our efforts, and the dogs were in good heart, we determined, at all hazards, to give him a gallop.

After unavailingly waiting an hour or so for our attendant, of whom, unfortunately, we saw no more that day—in which while the bear was covered over with Gran-ris as protection from vermin and falling weather—we started off for the Ring, which was at a distance of six to seven miles. But owing to the heavy state of the snow, and the broken nature of the country, it was long past noon before we reached it.

The dogs were now slipped, and, as on the previous occasion, only a very short time elapsed before the bear was on foot, and they in full pursuit. Soon after leaving his bed I saw the beast in the distance, but the view being transitory, and the gun in its case, I was unable to fire.

From its lesser size, this beast did not sink nearly so deep in the snow as the old one, and he had in consequence greatly the advantage over Elg and myself, who had literally to plough our way through the snow. As a set-off, however, the dogs enabled us to make many a short cut, so that for a time we kept a tolerably good place; but at length, and probably as well from exhaustion, as that we gave them no aid, the dogs fell back to us, and thenceforward rendered us but little assistance.

As our hopes of fairly running down the beast were now

at an end, we adopted a plan that on previous occasions had stood us in good stead. This was for Elg and the dogs to follow on the Spår of the bear, whilst I, guided by the man's shouts and the baying of the dogs, was to endeavour to meet the beast. But after the lapse of an hour or more, finding the manœuvre did not succeed, we changed places; for Elg being the faster runner of the two on Skidor, as well as more experienced in forest-craft than myself, it was thought he would have the greater chance of cutting in upon the bear.

Though considering it all but a forlorn hope, I in my turn now became the pursuer, and for a considerable time followed the Spår at my best pace, which, to tell the truth, was a most sorry one. At length, however, and as I began to despair, I came to a small opening in the forest, when the dogs, which by this time were thoroughly beaten, and at heel, suddenly rushed past me, and challenged loudly in a close thicket immediately ahead. Peering amongst the trees, and at a distance of about fifty paces, I indistinctly discerned a black object, which I suspected might be the bear, and at which I forthwith discharged one of my barrels. I was right in my conjecture, as a loud growl from the beast clearly evinced. The bullet had told, it subsequently appeared, in his hind-quarters, a part of his body of which Bruin is more specially careful; as with us bipeds, indeed, he would seem to look upon it as the seat of honour, and any injury to it always excites his utmost ire. This was the case in the present instance; for almost in the twinkling of an eye out he came full tilt into the little opening spoken of, where I was still standing. At first I thought the charge was intended for myself, and reserved my

second barrel accordingly; but I presently saw it was aimed at the poor dogs, who, with their tails between their legs, and with the bear close at their heels, scurried past me at some ten paces' distance.

THE DOGS IN A STEW.

It was an exciting scene, and is faithfully represented in the above illustration, for which, together with several other spirited drawings introduced in this work, I am indebted to Mr. Edmund Walker, one of our most gifted artists.

As the bear passed me I fired, and though he did not fall at the instant, it was pretty evident, from his pace slackening

into a trot, and from the stream of blood that marked his progress, that he was mortally wounded. Such indeed was the fact; for after proceeding two to three hundred paces, he came to a stand still on a little morass. Here Elg, who was not very far distant when I fired, and who was directed to the spot by the dogs — which, from being the pursued, had now become the pursuers — found him rocking to and fro in a dying state, and shot him through the head.

As the shades of evening had now set in, and we were somewhat exhausted from severe toil, and as besides the distance to the nearest house was very considerable, it is likely we should have bivouaced in the forest had our attendant been at hand with the eatables and the axe. But having nothing excepting bear's flesh on which to regale, and unable with knives alone to get up a sufficiently good fire to protect us from cold throughout a long winter's night, it was thought best to face at once for the nearest hamlet on the river Clara.

After placing the bear just shot *en cache*, we therefore set forward; and now that frost had again set in, and the snow in consequence was in a more favourable state for the Skidor, our pace was a pretty fair one.

Whilst wending our way homewards, I might well have exclaimed with the poet: "The beauty of the moonlit scene with its broad lights and shadows, and the solemn effects of silence and solitude, and night, in these interminable forests, made me halt in my advance, and gaze up into the depths, and feel the mightiness of the universe."

If our bodies were exhausted from the severe labour we had undergone, our spirits were sufficiently elevated; not, it is true, with wine, or rather finkel, of which the dilatory movements of our attendant had deprived us, but with the reflection that a good day's work had been accomplished; and though the way was long, yet as we put the best foot forward, we succeeded in reaching quarters three or four hours after sunset.

CHAPTER XXIII.

DIFFICULTIES ATTENDANT ON BEAR HUNTING — THE FISHING COTTAGE — TRACKS OF BEAR AND MAN SIMILAR — STARTING THREE BEARS — WANT OF CAUTION — ELG IN JEOPARDY — NORTHERN FORESTS BY NIGHT — EFFECTS OF COLD — STARTING A FOURTH BEAR — PROTRACTED CHASSE, ENDING IN THE DEATH OF ALL THE BEARS.

ALTHOUGH bears, as shown in the last chapter, are at times to be shot with facility; at others, owing to the state of the weather and the snow, the difficulty of killing them is very considerable.

Once—though this was not until the winter was pretty far advanced—being unable to hear of any ringed bear in Wermeland or Dalecarlia, Elg and I determined, if practicable, on rousing one ourselves. We selected for the scene of operations the tract of forest to the southward of Risäter—that bounded on the east by the lakes Råda-, Lid-, and Gräs-sjön, and on the west by the river Clara, where several of those beasts were believed to harbour. They had of recent years, indeed, committed considerable ravages thereabouts; and no later than the past summer M. Falk had got up a Skall on a very large scale for their destruction; but this, owing to

falling weather, and the consequent impossibility of keeping the people in proper order, proved a total failure.

In the first instance we took up our quarters at an uninhabited cottage, or rather hut, situated at the northern extremity of a fine lake, called the Skärgan, and at three to four miles to the eastward of Munkforss on the Clara. This hut had been erected by a former owner of the property for fishing purposes, to which, as was evidenced by the nets and angling implements hanging around the walls of the single apartment, it was still used in the summer season; and as there was a fire-place, and fuel in abundance, we made ourselves exceedingly comfortable.

In this quiet and secluded retreat, which was far away from the haunts of men, we remained for several days—and in that while diligently searched the forest far and near. The first two days we were quite alone; but on each of the other days we were aided by twenty to thirty men, kindly placed at my disposal by M. Falk.

But all our endeavours to get a bear on foot were unavailing. This was partly attributable to the depth and looseness of the snow; for though Elg and myself, who were on Skidor, managed well enough, the people, some of whom were not even provided with Skarbågar, got on very badly, and consequently not half the ground was traversed, as otherwise would have been the case.

Tiring of ill success, we resolved on shifting quarters. Despatching the baggage in a sledge, therefore, to the hamlet of Hällsby, situated a few miles to the southward of Munkforss, where some fifty men had been ordered by M. Falk to meet us on the following morning that we might search another line of country, Elg and I, with the dogs,

struck across the forest for the place of rendezvous, distant, as the crow flies, some seven or eight miles.

I for my part was much fatigued—and no wonder, as in order to keep the peasants in line, I had been necessitated, during the few preceding days, to work something like double tides, and our progress in consequence was somewhat slow. We, however, had all our eyes about us, and carefully searched every suspicious place met with on the way. At times we traversed the hill-sides, and at others plunged into deep ravines, where the ground was strewed with innumerable boulders, under which it often happens that the bear makes his winter bed.

Some snow had recently fallen, and the trees were mantled in white, which is not always the case towards the approach of spring. The appearance of the Scandinavian wilds when in that state is so beautifully and faithfully described by the talented and lamented Inglis, that I cannot refrain from quoting his words:

"Enter a forest when the sun breaks from the mists of a morning upon the snows of the past night. Beautiful as is a forest in the spring, when the trees unfold their virgin blossoms—beautiful as it is in summer, when the wandering sunbeams, falling through the foliage, chequer the mossy carpet beneath—beautiful as it is in the autumn, when the painted leaves hang frail—it is more beautiful still when the tall pines, and gnarled oaks, stand in the deep silence of a winter noon, their long arms and fantastic branches heaped with the feathered burthen, 'that has never caught one stain of earth.' Then, too, the grey rocks, picturesque even in their nakedness, assume a thousand forms more curious still when dashed with the recent offering."

But until the afternoon, we saw nothing of bears, or of their handiworks; then we noticed the stems of more than one large pine to be deeply scored by the claws of those beasts; and as the scores varied greatly in size, we were led to infer they had been made by a female and her cubs. The marks in question were of somewhat recent date—of the preceding autumn apparently—and we therefore judged the bears were not very far away. A good look-out was kept accordingly; but though all the thickets in the vicinity were very carefully explored, we saw nothing of the beasts.

At length we met with some very suspicious tracks in the snow, but so old, that it was hard to say whether they were those of man or bear. At all times there is considerable resemblance between the two, and more especially when they are stale. It appearing strange, however, that people should have been in the part of the forest we were then traversing—known to us to be little or not at all frequented in the winter time—we determined on following the tracks for a while.

But this was no easy matter, for where the snow had drifted they were entirely obliterated; and at times, therefore, we were altogether at fault. No one indeed but an experienced Chasseur, like Elg, could have made them out at all. So long as the tracks led through the more open parts of the forest, as in the first instance, no decided conclusion could be come to; but when they wound amongst tangled brakes, as was the case subsequently, where a human being, excepting on all fours, could hardly have penetrated, it was evident we were on the right trail. A month or five weeks previously some heavy rain had

fallen, and the probability therefore is that water had found its way into the den of the bear, and caused him, as frequently happens under the like circumstances, to quit it, and go in search of another and drier bed.

Shortly afterwards we came to a dense brake; and here, whilst peering among the underwood for a hare, started by the dogs a minute previously, my eye rested on a dark mass in the snow, which I presently made out to be the bear. Had my gun been in readiness execution might probably have been done; but very unfortunately it was not only in its case, but slung over my shoulder, so that a few seconds necessarily elapsed before it was ready for use. In the meanwhile the beasts—for it was a family party, consisting of a female, with two large cubs—had moved off, so that I was only enabled to take the merest snap shot at the hind-quarters of the rearmost, as they were retreating amongst the trees. Elg was at the time abreast of me, and at not more than thirty to forty paces from the bears; but though I hallooed to him the instant they were on foot, yet, owing to the closeness of the trees, which were loaded with snow, they were not seen by him.

Congratulating each other on our good fortune, and anticipating an easy victory, we immediately started in pursuit, but from the heavy state of the snow, at no very rapid pace; and the chase had not been of long continuance, when coming to an opening in the forest, which the bears had just crossed, we viewed them as they were again about to plunge into thick cover. Halting and slipping the guns out of their cases, both of us immediately fired, though ineffectually, I believe; and if so, the marvel was not great, for the distance

was considerable, and the beasts in great measure concealed by the underwood.

After reloading, and whilst replacing the gun in its case, the hammer, through haste and inadvertence, was lifted, and the piece exploded. There was no danger to Elg and the dogs, who were in another direction; but my own person escaped narrowly, for the gun being pointed downwards, the ball carried away a portion of the left Skida, within an inch of my foot! Had the foot been perforated, or a toe lopped off, it would have been inconvenient, for night was fast approaching, and we were far from home.

As it was, the matter was bad enough; for the explosion having blown away the upper end of the gun-case, the locks and the barrels were sure, in consequence, to be shortly filled with snow; and had it not therefore been for the greater convenience of carriage, the gun would have been just as well or better without its covering. Though anticipating it would soon prove useless, we nevertheless pushed forward; for even were it to fail, I had Elg's rifle on which to fall back.

If the bears had now kept to an open part of the forest, or to a tolerably level country, we should soon have been up with them; but they held, on the contrary, to precipitous and broken ground, and to the most tangled brakes, so that our progress was necessarily very slow. Some time therefore elapsed before they were again seen; and the view was then so transitory, and the distance so great, that it was thought best to reserve our fire.

At length, from sheer exhaustion, I was brought regularly to a stand-still; not so much, however, from the fatigue of the present run, which had been comparatively short, as from

the labour undergone during the few preceding days. But not liking to throw away a chance, Elg was directed to take the lead, and continue the pursuit at his best pace, whilst I followed at my leisure.

Not long after our separation, I was rejoiced to hear a shot in advance, and the dogs giving tongue loudly, whence I knew he had come up with the bears, and, as I trusted, had given a good account of one or other of them. I therefore made the most speed possible, in the hope of rendering him assistance. Soon, however, it was all but dark, and the tracks, as well of Elg as the bears, undiscernible; and as the dogs no longer challenged as heretofore, I was consequently just as likely to take the wrong as the right direction. This being the case, I deemed it best to halt and to fire a shot as a signal that I was out of my latitude. But all endeavours to discharge my gun were unavailing. It had recently been converted by a bungler from a flint to a detonator, and the plugs so badly fitted to the breech, that the powder found vent at the junction, and as a matter of course, the snow, melted by the heat of my person, had gained admittance into the chambers. I was soon, however, relieved from my disagreeable position, by hearing the shouts of Elg in the distance, and in the course of a few minutes again joined company with him.

He, it appeared, had been in considerable jeopardy. Sighting the bears in a small opening in the forest, at forty to fifty paces' distance, he attempted to shoot the old one, but very unfortunately his rifle missed fire. On hearing the explosion of the cap, the beast headed about in a rage, and charged to within three or four paces of him; but happily she did not proceed to extremities, for daunted by

the bold front assumed by Elg, who brandished the Skidor-stick—his only weapon—in her face, and the spirited attacks of the dogs, she thought better of the matter, and presently beat a retreat. Had it so happened that the man had actually fired, and only wounded her, it is probable, from the determination she displayed on the somewhat slight provocation received, he would hardly have escaped a broken head. Whilst in this very disagreeable position, Elg, as he told me, was momentarily expecting assistance from me; and it certainly was not from the want of inclination that I was not by his side in the emergency.

The shot I had heard was fired by Elg, almost immediately after he had been attacked by the old bear, at one of the cubs—which he described as being nearly of the size of its dam—whilst they were all retreating in company; but the distance, he said, was so considerable, that he doubted if his bullet took effect.

It was now night, and consultation was held as to what was to be done. To bivouac in the forest would have been unpleasant; for we had no axe, and without one it would have been impossible to prepare a proper watch-fire. To proceed to Hällsby, the hamlet spoken of as the rendezvous for the following morning, was the only other course open to us; but from thence we were seven or eight miles distant, and for the great part of the way we had to traverse a trackless and tangled forest. Nevertheless, as the minor evil, we decided on its adoption.

After taking a dram—which, let teetotalers say what they will, was, in our wearied and dispirited condition, most beneficial—we started forward. But considerable difficulty was experienced in groping our way amongst the prostrate

trees and boulders, with which the ground in places was thickly strewed. The moon, however, which was at the full, and shining brilliantly, was of essential service in illumining our path; without its aid, indeed, it would hardly have been possible for us to have reached the shelter of a roof before the morning broke.

"Something approaching to the appearance presented by a northern climate in summer," to quote Mr. Inglis again, "may be witnessed in other countries; but the splendours of a winter scene belong only to the higher latitudes. For when night comes—and whoever saw the glories of night save in a northern clime!—out burst the stars, countless and burning, studding the deep-blue sky. Perhaps the borealis, with its pale-yellow light, streams over half a hemisphere; or perhaps the winter moon, full and high, looks down from the brow of night, spangling with ten million stars the beauteous net-work thrown over the lower world."

The weather was severe; the quicksilver, as ascertained by a thermometer always carried in my kit, some 15° below zero of Fahrenheit—that is, there were near 50° of cold; and it was felt the more, as during the chase we had been excessively heated. What with perspiration, and the melting of the snow consequent on the heat of our bodies, we were both wet to the skin. Provided as I was with a flannel-shirt and a moderately warm jacket, I suffered no serious inconvenience. But it was not so with my faithful comrade, who, from being somewhat thinly clad, and from wearing a linen-shirt next the skin, suffered much from the cold, and trembled like an aspen leaf. And no wonder; for be it remembered, that from the severity of the frost our coats,

when unbuttoned, almost instantly became as stiff as coats of mail; and our large dragoon-like gloves, also wet through and through, if withdrawn from the hand a minute or two, as hard as iron gauntlets.

Bitterly the poor fellow complained—more so than I remember either before or since; but the evil was unavoidable, for to prevent breaking the Skidor we were necessitated to proceed at a snail's pace. Had that misfortune happened, it would have put us to some inconvenience, for the snow being two feet or more in depth, it would not have been possible to finish the journey on foot, and we must, in consequence, have passed the night in the forest as best we could.

At length a beaten track, leading to the Clara, was gained, when all difficulties ceased. As the ground henceforward was falling, we were enabled greatly to increase our speed, and the blood was soon brought into proper circulation; but it was past midnight, nevertheless, before we reached the village that was to afford us temporary shelter.

On the morrow, at five o'clock, we were again on foot, and not very greatly refreshed either; for what with satisfying the cravings of hunger, drying clothes, and putting the guns in order on the preceding night, it was near two o'clock before we turned into bed, and consequently we had only enjoyed two to three hours' repose.

Had we now acted according to rule, we should either have gone in pursuit of, or have ringed, the bears started on the preceding afternoon. But the peasants being assembled, agreeably to the orders of M. Falk, we were obliged to leave the beasts to themselves for the present.

The men were therefore marched some five to six miles

to the eastward, to a deep and thickly-wooded glen, called *Djup-dalen*, or the deep dale, where it was supposed a bear harboured; and after forming line in the usual manner, we beat the country before us.

The Skall had hardly commenced, when it was reported to me that the people had fallen in with the tracks of a bear. As, however, we were then in nearly the same line of country as that traversed on the preceding day, it was at first imagined they might be those of the beasts we then chased. But this was not the fact; for on examination they proved to be those of another and larger bear, which Elg and I, when on our way homewards the preceding night, had, though unknown to us, roused from his slumbers. It appeared by the marks of our Skidor, that we had passed within three or four hundred paces of his bed, which he had no doubt deserted in consequence of hearing the dogs giving tongue, as we remembered them to have done, at some birds they had flushed from the ground.

Directions having been given to the people, as to the course they were to take whilst searching for a fresh bear, Elg and I forthwith went in pursuit of the beast whose tracks we had just fallen in with.

These we leisurely followed a considerable distance, and until such time as the dogs again roused the bear, when we put our best foot foremost. The chase had not been of long continuance, when, on coming to a rather open part of the forest, we viewed the beast—a noble-looking fellow—at about one hundred and fifty paces' distance. In imagination, indeed, we called him our own; but there "is many a slip betwixt the cup and the lip." From sinking deep in the snow at every step, his progress was slow, as was ours also; so that,

although we exerted ourselves to the utmost, he had again plunged into thick cover before we had approached sufficiently near to make it an object to fire.

The beast was apparently distressed, and had he held to the more open part of the forest, and that the dogs had constantly kept with him, the chase would soon have been ended; but as, on the contrary, he doubled to and fro in the thickest brakes, and as the dogs were not always in their place, we were unable to come to close quarters. This being the case, Elg and I, in the hope of intercepting him, separated and took different courses; and the plan so far succeeded, that both of us subsequently got transient views of the beast—Elg, indeed, fired at and wounded him, as was shown by a few drops of blood visible on the snow. But the ball having taken effect in his hind-quarters, the wound did not seem materially to retard his progress.

At times together, and at others separated, Elg and I for several hours thus dodged the bear; but all our endeavours to close with him proved ineffectual. Finding, at length, he was gaining upon us (a beaten path that he had for a time pursued having given him the advantage), and as evening was now approaching, we deemed it best to discontinue the pursuit, and to turn our steps homewards, where, wearied and dispirited, we arrived long after dark.

The following day turned out very wet and stormy, and as nothing could then be done with the bears, I left Elg to look after them, and returned to Brunnsholm, then my temporary quarters, which was distant nearly twenty miles.

Two days subsequently word was brought me, that Elg had succeeded in ringing all the four beasts—the

larger one in the same line of country where he had been roused in the first instance; the others at some distance to the eastward, and near to a lake called Kalf-sjön. The thaw, which was accompanied by much rain, still continuing, however, I remained for a while at home, until such time, indeed, as the heavens promised a change for the better, when I proceeded to Hällsby.

Here Elg and I passed the night, and on the following morning set off at an early hour to attack the large bear. At starting there was a degree or so of cold, but by the time we reached the Ring, which was of unusually great extent, the temperature had turned so much milder, that the snow became kram. Rather than attempt to run the beast down, as was our first intention, but which was now next to an impossibility, we thought it best to essay stealing upon him whilst in his lair.

For this purpose—with the guns in readiness for immediate use, and with the dogs in couplings—we followed his tracks in deep silence. But our progress was slow, as well from the denseness of the cover, as that the beast, before lying down, had made very many doubles. In some instances, moreover, he had followed his old tracks (which intersected the Ring), so that we were not unfrequently somewhat at fault. The afternoon was therefore well advanced before we reached his bed, which was in a very dense thicket; but we were somewhat too late, for before our arrival he had taken the alarm and moved off.

The bear being on foot, and it being quite certain that, whether chased or left alone, he would not halt again in a hurry, we uncoupled the dogs, who, now that they had rested for some days, were themselves again, and dashed merrily away

in pursuit. Seeing from the first, however, that owing to the very unfavourable state of the snow, there was no chance of overtaking the bear, Elg was directed to follow in his track, whilst I, guided by the challenges of the dogs, endeavoured to cut in upon him; and the plan in part succeeded, for on one occasion I viewed the beast as he was ascending the face of a rather precipitous hill, and sent a ball after him; but as the distance was great, and as he neither flinched nor slackened his pace, the presumption is that it went wide of the mark.

The day was now drawing to a close, and seeing the uselessness of farther pursuit, we directed our steps to a neighbouring cottage; and as we here found wherewithal to satisfy the cravings of hunger, and a truss of straw on which to stretch our wearied limbs, we passed the night in tolerable comfort.

We were in hopes that during the night the weather would have changed for the better; but the reverse was the case, for the following morning was ushered in with a storm of wind and rain. As nothing therefore could be done that day, Elg was instructed to ring the bear chased the preceding afternoon, whilst I struck across the forest on Skidor to Östanås, the residence of the Chamberlain, M. Croneborg, a distance of three or four miles, where I was most kindly received and entertained.

In the evening Elg rejoined me, and reported that he had succeeded in ringing the beast at some five or six miles to the north-eastward, and at no very great distance from the other three bears; but the weather continuing unfavourable during the following day, we kept the house, where a good library and the amenities of civilized life, if they did not

compensate for extreme ill-luck, enabled me, at all events, to pass the time very pleasantly.

On the succeeding morning, however, there was a degree or two of cold, and knowing that the Skidor could now be used to some advantage, we therefore started off in a sledge at the first break of day.

As during the last Chasse we had seen the impossibility of circumventing the bear by stealth, it was determined that on this occasion we should attempt to run him fairly down. Soon after reaching the Ring, therefore, the dogs were uncoupled, and presently opened in grand chorus.

The beast was started near to the foot of a rather precipitous and closely wooded hill; and as he at first faced up the acclivity, Elg and I for a time lost ground; but when he arrived near to the summit of the hill, where the surface was more level, we, in our turn, gained on him apace. For a while he threaded the one dense brake after the other, where the difficulty of following him was considerable. At length, however, he made somewhat down the declivity, with the dogs in full cry at his heels, for a sort of vista leading to the valley below. The ground being now greatly in our favour, we were not slow in following, so that by the time the beast emerged from the thicket into the opening, we were not at more than thirty to forty paces' distance. As Elg, who was just in advance of me, had his gun in perfect readiness, whilst mine on the contrary was only partially uncased, I directed him to fire, which he attempted, though unsuccessfully. On hearing the click of the lock, the beast, who was previously in the act of retreating, wheeled about, but whether with the intention of charging, as Elg supposed, or not, is hard to say. By this time,

however, my gun was in order, and as he faced me, I fired, when he instantly fell.

This bear, a male, was subsequently sent by M. Falk to the National Museum at Stockholm, where, to this day, I am told, he cuts a most respectable figure.

It was our intention to attack the other bears on the following morning, but this purpose was frustrated by a renewal of the thaw that had so long marred our operations. So enduring a one I never remember in the northern forests, where the frost usually lasts from about the beginning of November to the first or second week in April, and is rarely interrupted by more than a very few consecutive days of open weather. For two other days, indeed, owing to continued rain, we were necessitated to remain idle; but the wind, which for some time past had been from the southward, now veered to the opposite point of the compass, and the frost set in again with some severity.

At an early hour of the succeeding morning, therefore, we started for the Ring, which was only three to four miles from Östanås. But a great alteration had taken place in the state of the snow. Previously, from the mildness of the temperature, and the quantity of rain that had fallen, it had not only sunk a foot or more, but was in quite a slushy state; now, on the contrary, its surface was so hard frozen as to support man as well as beast. Though in beautiful order for our Skidor, there was little chance therefore of fairly running down the bears. It was worth a trial, however; for as the old saw has it, "nothing venture, nothing have."

But as the beasts had been undisturbed for some time, it was thought not improbable we might be enabled to steal

upon them whilst in their lair; and prior to starting them, it was determined to make the attempt. On reaching the Ring, which was situated on the face of a hill overlooking Kalf-sjön, we, therefore, with due precaution, followed on their tracks, which, although some three weeks old, were still quite visible. As the bears had taken a very tortuous course, however, a good deal of time was lost before reaching their bed (an excavation in an immense ant-hill); but this, to our great chagrin, was found untenanted—the beasts, as we had reason to believe, having bolted a minute or two previously.

The dogs were now uncoupled, and the chase commenced. But soon afterwards, and whilst in the act of descending an abrupt declivity, one of my Skidor, coming in contact with some hard substance, snapped short in two!—An accident, by the bye, always more likely to happen when the surface of the snow is frozen, than if it be in a loose state.

Luckily, I had a spare Skida at a cottage hard by; so calling the dogs to heel, and directing Elg to wait my return, I hasted for it. An hour or more, however, must have elapsed before I rejoined him, during which while the bears had, no doubt, made good use of their legs; but there was no help for this, and so we at once renewed the chase.

At first—and from having to contend with rising ground, and somewhat close cover—our progress was rather slow; but when the summit of the hill was gained, and the forest became more open, we pushed rapidly ahead. In some places, however, the tracks of the bears were nearly imperceptible, and had it not been for a sprinkling of snow which had fallen during the past night, would have been wholly so. The beasts, as we saw by their tracks, generally proceeded in a

gallop. Had they doubled at all, nevertheless, it is very possible that, with the assistance of the dogs, a good account might have been given of them; but unfortunately their course was nearly as straight as the crow flies; and as we were not enabled to turn them in a single instance, it was considered best, after the lapse of about three hours, to desist for that day from all farther pursuit.

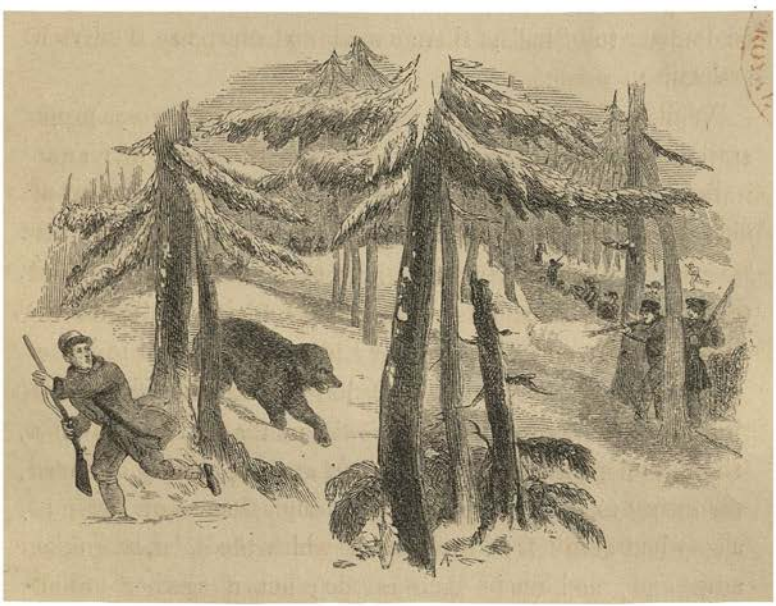
Somewhat tired and dejected, we therefore faced for home. On our way—and in the wilds of the forest—we came to a cottage, where I left Elg to pass the night, with directions to ring the beasts on the following day, and afterwards to rejoin me at Östanås, to which place I myself forthwith proceeded.

But it was not until the third day that my man made his appearance. He reported having ringed the beasts far away to the south-eastward, at a distance of fifteen to eighteen miles from their last lair, and upwards of twenty from that occupied by them in the first instance; also, that he had had great difficulty in accomplishing the task, from the Spår being imperceptible in many places.

As in the then state of the snow any farther attempt to run down the bears on Skidor was pretty sure to prove a failure, and as besides rousing them again would be attended with great risk—for unless killed, and that snow was to fall, (whereby the tracks would be obliterated), they might escape us altogether—it was determined that a Skall should be got up for their destruction. I therefore posted off to the authorities of the district, who, on seeing my credentials furnished by M. Falk, immediately placed between three and four hundred men at my disposal.

Elg and I now proceeded to Lindforss, near to which

place the Ring was situated. Here are considerable iron-works, the proprietor of which, M. Geijer, kindly received and hospitably entertained us. And as two or three days must necessarily elapse before the Skall, we employed ourselves in the interim, as well in reconnoitring as reducing the size of the Ring—which in the first instance must have been five to six miles in circumference—as in searching the neighbouring forest for another bear, supposed to be lying thereabouts; but though we beat much ground, our efforts to get the beast on foot proved unavailing.



THE SKALL.

On the appointed day the Skall (of the nature of which the above sketch will give some idea) took place. The Ring

was circular in form, and embraced nearly the whole face of a well-wooded hill, at the foot of which, and partially surrounding it, was an extensive and open morass. Here, within easy gun-shot of the cover, the centre of the Håll was posted; that of the Dref, on the contrary, was drawn up on the crest of the hill itself. After that the Cordon was completed, Elg and I, who were on Skidor, employed ourselves in correcting irregularities in the line, drafting men from places where they were superfluous, strengthening weak points, &c. And we had ample occupation; for the people thereabouts not being much accustomed to Skalls, there was no one to render us assistance.

Whilst thus engaged at the Håll, the Dref—my proper station — owing to some misconception, made a forward movement. This was contrary to positive orders, the people having been directed to remain stationary until my return. Soon afterwards a few straggling shots were heard, which, together with the shouts of the people, plainly indicated that the bears were on foot. Leaving Elg, who happened to be near me, in command of the Håll, I hastened to the Dref to stop its farther advance. But by the time I reached this division, the mischief anticipated had, in part at least, already occurred; for owing to the hurried and disorderly advance of the men, a gap had been left in the line, of which the cubs had taken advantage, and made their escape; not altogether unhurt, however, as was apparent by some blood to be seen on the snow. But the old bear, I was glad to find, was still within the circle.

A halt was now ordered, during which the gap in question was filled up, and the line dressed afresh. When everything

was duly arranged, we again moved forward, though this time very slowly, and in compact order. For a while we saw nothing of the remaining beast, and I therefore began to think she also might have given us the slip; but on the Dref arriving near to the foot of the hill, where there was an almost impervious brake, outside of which the Håll was stationed, she became visible at several points, and was assailed with shots from all sides. From the closeness of the underwood, however, and the want of skill in the marksmen, she still kept her legs. Fearing that if the circle were more contracted than at present, casualties, through stray bullets, might occur—a general halt was ordered. As yet I myself had seen nothing of the bear, attributable probably to my attention having been much occupied in keeping order amongst the people. Being desirous of a shot, as also of putting an end to the *fusillade*, from which I dreaded mischief, I proceeded alone some forty to fifty paces into the thicket—to that part of it for which, judging by the shots, the beast was making—and I chose my ground well, for a minute afterwards she advanced directly towards the spot where I was ambushed. Allowing her to approach to within ten to twelve paces, I fired, when she immediately fell; but life was, nevertheless, not extinct, for she again rose upon her legs, and staggered a pace or two forward, when closing with her, I, with my remaining barrel, shot her through the head.

When the Skall was over, Elg started to ring the cubs, which, after breaking the line, had taken different directions; but subsequently, as seen by their tracks, had joined company. Owing, however, to their tracks not being visible everywhere, and to the forest thereabouts being much inter-

sected by beaten paths, where they were altogether undiscernible, the task was a most difficult one; and it was not until after the lapse of a couple of days that it was accomplished. Even then Elg was necessitated to take in so great an extent of country that the Ring was not less than eight or nine miles in circumference.

From the then state of the snow, it would hardly have been possible to kill the bears otherwise than by means of a Skall; and as properly to encompass so enormous a Ring as the present, required a larger force than I could get together, I drove in my sledge to Risäter, a distance of about forty miles, and obtained from M. Falk a warrant to call out the requisite number of men.

On the very day of my return to Lindforss, however, we had a fall of snow; before making use of my credentials, therefore, we deemed it best to start the bears, and to ring them afresh; for the more the circle was diminished in size, the fewer people would be required to circumvent it. On the following morning Elg and I set out for that purpose, and after the lapse of several hours succeeded in rousing the beasts. Some six inches of newly-fallen snow now covered the frozen crust, which enabled us to follow their tracks with every facility; and had the weather been cold, they might very probably have been run down; but as, owing to the mildness of the temperature, the snow so fastened to our Skidor that we could only proceed at a foot's pace, it was thought best to leave them unmolested.

On the next day Elg ringed the bears, and in the same line of country in which the old one had met her doom. And as the present Ring was of small extent, and time pressed, it was agreed that instead of a government

Skall, as projected, we should beat up for volunteers. For this purpose M. Geijer kindly lent his assistance, and notices were sent to all the hamlets round about.

At an early hour on the appointed day, which was in the early part of April, we had the gratification to see nearly three hundred men assembled at Lindforss; but it unfortunately rained, and in consequence we all had dismal forebodings. There was no help for it, however; so after the usual forms had been gone through, the people were marched off to the Ring, which might be at four to five miles' distance. But just before the Skall was *Knäpt* (that is, the lines united), the bears took the alarm, and made their escape through the opening.

We were sadly annoyed, and no wonder, for the probabilities were twenty to one against the beasts being killed that day, or even at all, now that the winter was so very far advanced. It was determined, however, not to throw away a chance; and Elg, accompanied by two peasants well acquainted with the locality, was therefore directed to use his best endeavours to ring them once more.

In the meanwhile I marched off the men to a cottage hard by—such of them as remained, at least, for many had now left us, and returned to their homes—in readiness to act in the event of Elg's succeeding in his object, of which I entertained but faint hopes.

But my predictions proved incorrect, for some three hours afterwards a messenger arrived with the glad tidings that the bears were again encircled, and at no very great distance from the house. In the course of a few minutes afterwards the people were in a degree organized, and at the *pas de charge* we made for the Ring, which must have been near three miles

in circumference. By stationing the men at considerable intervals apart, our small party was, nevertheless, sufficient to complete the Cordon.

For a while after the Skall commenced nothing was to be seen of the bears. But at length a straggling shot at different points of the line told that they were on foot. More than once, indeed, I obtained a glimpse of them in the distance, but they were so shrouded by trees that I did not care to fire. Presently, however, the shouts of the people and the heavy firing to the right of me, clearly indicated something was coming, and in a few seconds one of the bears galloped past us at the top of his speed. I, as well as several others, fired, and the beast staggered; but the bullet that terminated his career was from the rifle of a friend standing at forty or fifty paces to the left of me.

Of the remaining bear, we of the driving division saw no more; but to judge by the firing at the Håll, he was making strenuous efforts to escape in that direction. Soon, however, all was still, and shortly afterwards it was reported to me that he also was killed.

A few hares still remained within the Cordon, which, it being contrary to rule to shoot, were knocked on the head. The Skall then terminated, and at a quite sufficiently late hour; for as the last shot was fired the sun was just sinking below the horizon.

Three cheers were now given to commemorate our success; and after thanking the peasants for their friendly aid, we separated, mutually satisfied, it is to be hoped, with each other, and departed for our respective homes.

Thus ended a Chasse, which, from first to last, occupied us from four to five weeks, in which time much ground was

gone over, and much hardship and fatigue endured. From want of incident, it is perhaps unworthy of record, much less of the story being told at length; but I have purposely entered into details, the better to exemplify some of the many obstacles and inconveniences with which a man has to contend, whilst prosecuting his sport in the wilds of Scandinavia.

CHAPTER XXIV.

THE SNOW—EXPEDIENTS TO ROUSE BEARS—STARTING AND KILLING A BEAR—RUNNING THE GAUNTLET—FATAL ACCIDENT—WRETCHED GUNS—EFFECTS OF IMAGINATION—A WELL-DIRECTED SHOT—THE WRONG BEAR—THE BARRICADE—UNEARTHING THE BEAR—HER DEATH.

BEARS, as said, are very scarce in Scandinavia. Unless ringed, or that a good guess can be made as to their locale, a man may often search the northern forests for days, or even weeks together, without getting one on foot. It does happen, nevertheless, that even under unfavourable circumstances, and without proper appliances, he at once stumbles on the beast.

Towards the close of the winter 1846-7, I proceeded into the Wermeland Finn-forests in the hope of enjoying a hunt. But as on my arrival at Brunberget, I could not learn that any bears were ringed thereabouts, it became needful to look for one myself. I would gladly have engaged Elg and others to assist in the search; but from being occupied either in hewing timber, or in transporting the same to the Clara and other rivers, it was not possible to prevail on any

one to leave his home. Nor did I succeed much better at the Finnish hamlet of Ofverberget in Dalecarlia, distant six or seven miles from Brunberget, where I proceeded on the following morning—for only a single peasant would consent to follow me. At that time, indeed, men in the Finn-forests were hardly to be had for love or money.

Though thus miserably appointed, yet as it was then the very end of February, and consequently no time to be lost, I and Nils—that being the name of my new comrade—started at once for the wild range of forest to the northward of the magnificent lake Qvinn, where rumour said a large bear had harboured for several past winters. The man bore on his shoulders a kit containing a sufficient supply of provisions for a couple of days, as also an axe, but he was without a gun or other weapon.

Owing to the delay occasioned by making the needful preparations, it was past noon before we reached the ground, when the search at once commenced. Every spot likely to shelter the bear was carefully reconnoitred; the huge boulders with which the ground was in some places strewed, were peered under, and the denser brakes threaded; but the snow, which was some three feet in depth, was loose, and in an exceedingly unfavourable state, as well for the Skidor as for the dogs, who sunk to the middle at every step; and our movements, in consequence, were anything but rapid.

In Lapland and other more open countries, the snow—from the wind having freer access to it whilst falling, and thereby causing it to pack—soon obtains considerable consistency. But in deeply wooded districts, like Wermeland and Dalecarlia, it often remains in quite a loose state throughout the winter. This is the great drawback to bear

hunting. If the snow is in good order, few things are more pleasurable than roaming the northern forests on Skidor: the mountain and the valley, the river and the lake, are then traversed with rapidity and ease; but should the snow, on the contrary, be in bad order, it becomes in that case a toil rather than an amusement; for one's pace is that of a snail, and nothing but the excitement of the chase would ever induce a man to submit to the slavery and fatigue he must necessarily undergo.

To give us a better chance of getting the bear on foot, many shots were fired in the course of the afternoon; so that if he happened to be lying in the vicinity, he might take the alarm and leave his bed. But all our endeavours to rouse the beast proved fruitless, and at dusk, therefore, we halted to prepare quarters for the night.

A well wooded and sheltered spot was selected for that purpose, and a suitable pine soon felled; but as we had only a single axe, some time elapsed before the fire was kindled, and the bivouac in order. Ample justice was then done to the contents of the kit, after which we resigned ourselves to repose.

On the following morning, at a pretty early hour, the search was resumed. As on the preceding day, the peasant and myself formed line, so to say, and beat the forest before us; and as then, it once more rung with our shouts and the report of my gun, which I repeatedly discharged; the dogs also occasionally opened upon birds, which added to the clamour. Thus we proceeded for three or four hours, but still no bear was forthcoming.

At length, however, the dogs challenged at some little distance ahead, and in a manner clearly indicating they had

fallen in with the bear, and that he was in full retreat. At this time I was on the hill-side above, and had, therefore, greatly the "vantage-ground;" so losing not a second, I pushed on at the top of my speed, and fortunately succeeded in cutting in upon the beast. This was in a very dense brake; and though he was not more than ten or twelve paces distant, yet owing to the thickness of the cover, and the incessant attacks of the dogs, which were close at his heels, he seemed not aware of my presence. Vividly remembering the severe mauling I had received from a bear only two years before, I was not at the moment without misgivings as to my personal safety; and no marvel, as were my aim to be erring, the prospect was far from agreeable; for stuck as my Skidor were amongst the trees, retreat was impossible; and from my companion, who was at some distance in the rear, and who was only armed with an axe, aid was not to be expected. As my gun was in perfect readiness—for whilst making for the spot, I had cast aside the cover—I at once fired, and as luck would have it, the bear rolled over and over. Though prostrate, however, life was not extinct, and fearing that in his death-struggles, which were violent, he might destroy the dogs who had gallantly fastened on his shaggy hide, I ran close in upon the beast, and shot him through the head.

Our capture proved an old and tolerably large male; and as it was not practicable to transport him at this time from the forest, we left him where he fell, first taking the precaution of covering him with Gran-ris, as some protection from the weather and beasts of prey.

This operation completed, we started in search of another bear, believed to be couched in a lofty hill at some little

distance; but though we beat the forest far and wide for the rest of the day, our efforts to start him were unsuccessful; and at dusk, therefore, we faced for Öfverberget; but being sadly wearied, we did not reach it until an hour or two after dark.

"Fear," they say, "scares people at times out of their propriety." Be that as it may, an over-excited imagination not unfrequently conjures up images that have no existence excepting in a man's own brains. Of this fact, when bear shooting, I have myself seen more than one ludicrous instance.

During the earlier part of the winter of 1848-9, some peasants in the parish of Ny in Wermeland, whilst engaged in elk hunting, accidentally roused a large bear from his den. Subsequently he was exposed to much persecution; for not only was a Skall on a pretty considerable scale got up for his destruction, but he was chased on two or three occasions by Finns and others on Skidor. And though he had run the gauntlet thus often, and though badly wounded, he managed to elude his pursuers.

In the northern forests, when the bear is started, and travels far and wide, and that it is not convenient for people to follow him in all his wanderings, it frequently happens that, by purchase or otherwise, he changes owners more than once. This had been the case in the present instance; and when I arrived in Wermeland in the beginning of February, 1849, some peasants at the Finnish hamlet of Löfskogsåsen claimed the beast as their property. To this place, which lay at twelve to fourteen miles to the north-west of Brunberget, Elg and I forthwith proceeded on Skidor; and after some little bargaining, and the payment of some rix-dollars, the right and title to the bear became vested in me.

To buy the bear was one thing, but to bag him another; and this, for more reasons than one, was by far the most difficult part of the affair. The snow in the first place was loose, and in no very favourable state for Skidor; it besides lay very unequally—for owing to heavy rains in the early part of the winter, there was comparatively little on the lower grounds where the thaw had taken greater effect; whereas on the higher grounds it was three feet or more in depth. Of this circumstance the bear, who is a tolerable good judge of such like matters, was nearly certain, when once started, to take advantage, in which case it would have been no easy matter to come to close quarters with him. And then again, he had already been so persecuted that he was pretty sure to keep a good look-out, so that the chances of being able to steal upon him whilst in his lair were very slight.

Thinking the latter plan the most feasible, we determined on its adoption. On the following morning therefore, at an early hour, Elg and I started for the Ring, which was at some six to seven miles to the north-east of Löfskogsåsen, and at about twenty from the beast's original bed. We were accompanied by a peasant named Jan—one of the individuals who had taken part in the several Chasses spoken of—who bore a well-filled kit, as also an axe, the length of our stay in the forest being very uncertain.

Some half-a-dozen winters before, this man, in company with three others, set out from home in search of a bear, and at length came upon one of those beasts, who had taken up his abode under a huge boulder. All the men were armed with rifles; but most unhappily, whilst they were congregated about the mouth of the den, and in the act of

shooting the bear, the gun of one of the party went off accidentally, and the ball passing through the head of a comrade, killed him on the spot!

Similar occurrences are not unfrequent in the northern forests; and one cannot wonder at it, after seeing the very wretched guns generally used by the peasantry. The locks are at times so defective, that it is only by retaining the hammer in its proper position with the hand, whilst the aim is taking, that the gun can be fired. During a three days' excursion in the forest, indeed, only two years ago, the guns of both my men—sportsmen in their way—were, owing to some defect or other in the lock, rendered utterly useless before our return home. To say nothing of accidents amongst themselves, it is mainly owing to this state of things that the northern Chasseurs are so frequently maltreated by bears.

To proceed. On reaching the ground, and after posting our guide, Elg and I entered the Ring. Fortunately it blew desperately hard, and that even in the forest, where one seldom feels much of the wind. This was greatly in our favour, as what with the rustling and crashing of the trees, as the gale surged through them, the bear was little likely to be aware of our presence, until such time as we were close upon him. The wind being from the southward, we took the precaution of commencing operations at the northern extremity of the Ring.

Had there been only a little snow on the ground, we should from choice have proceeded on foot; but the snow being rather deep, we were necessitated to retain our Skidor, which, in thick cover and broken ground, are always inconvenient, and hamper one's movements greatly. Previously

to entering the Ring, both Elg and I had divested the guns of their cases, and we were therefore quite prepared for immediate action. In profound silence we commenced the search, and threaded all the denser and more likely thickets; as also carefully examined every boulder, and the roots of such prostrate pines as came in our way. But though we were thus occupied for an hour or more, we neither came across the bear himself, nor did we see any marks indicative of his presence.

All in a moment, however, when at about fifteen paces to the left of me, Elg—whom I had directed to fire in the event of his falling in with the beast—discharged his gun, and shouted loudly at the same time: "The bear! the bear!" But though I strained my eyes to the utmost, nothing was to be seen in the thicket but a scathed and blackened stump at some thirty to thirty-five paces in advance of where I stood, and towards which, fancying the beast might be lying at its roots, I made up in double-quick time. But on reaching the spot, neither the bear nor his bed were visible; and I presently found, to my great amusement, that, whether owing to his sight being dimmed by age, or to a fertile imagination, Elg had mistaken the aforesaid stump for Bruin, and lodged a bullet in its very centre. This discovery afforded us both much merriment, and I for my part hardly desisted from laughing for the next half-hour.

The report of Elg's gun under ordinary circumstances—even had the distance been considerable—would in all probability have alarmed the bear, and caused him to bolt forthwith. But as we were still somewhat in the northern part of the Ring, and as it was blowing a half-hurricane from the

southward, we entertained great hopes he might be in ignorance of the "untoward event." After a while therefore, and that our mirth had subsided, the search was resumed.

And we had not been thus occupied a very long time when, at some thirty paces to the right of me, a dark object, evidently possessed of vitality, attracted my attention. At this I forthwith let fly, and clearly with effect; for the object aimed at, whatever it might be, sunk at once into the snow. For an instant a qualm came over me: a sort of doubt arising in my mind whether it was the head of a man or that of a bear at which I had fired. A nervous feeling of this kind, indeed, has never entirely left me since the dreadful catastrophe of which mention was recently made. But my apprehensions were presently allayed; for in a few seconds the bear, evidently desperately wounded, rose bodily in view and retreated from his couch. I now discharged my second barrel; but from the closeness of the brake, and an imperfect view, without bringing him to the ground. A third shot, however, fired by me with Elg's rifle—for the man who previously had been at some paces to the left of me, had now come up and placed the piece in my hand—put an end to his existence. But the two last balls were almost needless; for though my first was the meerest snap-shot, the bullet was so well directed as to enter the skull all but between the eyes; and if instead of passing somewhat downwards, as was the case, it had entered the brain, it would of course have killed him on the spot—as it was, it caused so great an effusion of blood as must have destroyed life in a very short time.

The bear—a large male—fell dead within ten paces of his

lair; but instead of being reduced to a shadow, as, from having been so much hunted in the early part of the winter, we expected, he proved excessively fat; and his reputed wounds were found to consist of a mere scratch on the nose, the scar of which was then hardly perceptible.

All this seemed passing strange, and in spite of our guide's assurance to the contrary, Elg and I had very strong misgivings that we had fallen in with the wrong bear; and it was not until a fortnight afterwards, when we took the trouble to search the Ring for the second time—and for that purpose proceeded on Skidor all the way from Brunberget, a distance of some twenty miles—that we gave up, in a degree at least, the notion.

The mystery was cleared up in the spring, when the wounded bear was found dead at six or seven miles from the Ring, made by the peasants previous to that of which I was the purchaser. It appeared that whilst beating this Ring the men had not only started the wounded bear but a fresh one —the beast killed by us—but that in the ardour of the chase they had overlooked the track of the wounded bear, which had taken an opposite direction. After all, therefore, Elg and I were right in our conjecture. And if we had only had the wit to have reflected somewhat more on the subject, we should in all probability have bagged two bears instead of one.

The bear, as mentioned in my former work, frequently selects for his winter quarters the cleft of a rock; and it is on record that, owing to water dripping from above, such a mass of ice has accumulated at the mouth of his cavern as to block it up entirely, and thereby retain him a prisoner until the spring.

It happens also, when the cleft of a rock constitutes his den, that the bear, so to say, incarcerates himself; for the moss, which he sometimes places in quantities at the very entrance, forms, when congealed, a barrier through which he cannot readily force his way. Though it is probable the moss thus drawn together by the bear, is only intended to serve as a temporary bed, preparatory to retiring to his regular dormitory, it is the general notion that he deposits it there to make his quarters more snug during the winter months; as also that the custom is confined to females with cubs, or rather to such as are about to have an addition to their families.

Two days subsequent to the Chasse last spoken of, Elg and I, not gaining intelligence of other bears, started on Skidor with the dogs for a wild range of country to the eastward of Löfskogsåsen, in search of one of those beasts, which was believed to harbour thereabouts. We were accompanied by two peasants, who—as we anticipated passing more than one night in the forest—carried, together with an axe, an ample supply of provisions.

The first day our search proved unsuccessful; but on the morning of the second, and when beating a rather thinly wooded knoll, the dogs opened in a way that convinced me they had fallen in with a bear, or other noxious animal. I hastened to the spot where the dogs were challenging, but could see nothing; neither did they seem to be sensible whence the taint they had caught proceeded. Presently, however, I noticed a chink, as it were amongst the rocks, but on looking down found it apparently untenanted. From its very confined dimensions, indeed, it seemed hardly capable of containing any bulky animal. In this cavity, or rather in an interior chamber, which I had not previously observed, the bear, as

shown by the dogs, that now came up, was nevertheless snugly ensconced; and cubs also, as we knew by their very audible cries.

When in the early part of the autumn the bear took possession of this den, the entrance to it was no doubt not only easy of access, but quite visible. What with a barricade of moss, similar to that recently spoken of, and some three feet of snow, which then covered the ground, it was now hardly perceptible; and had it not been for the dogs, and for some marks made by the beast in the surrounding trees, we might have passed the spot fifty times over without noticing it.

In the then state of the aperture, it was quite impossible for the bear to leave the den. Taking off our Skidor, therefore, we proceeded to unearth her. But this was no easy matter, and only to be effected by hewing away, with the axe, the embankment in front. Whilst the men were thus occupied, and to guard against the possibility of her making a sudden rush, two stout stakes were driven crosswise in front of the orifice; though this precaution was perhaps needless, as she made no effort to escape.

It must have taken an hour or more, nevertheless, before a passage sufficiently large to admit of the egress of the bear was cleared. When this was accomplished, the peasants were ordered to the rear that they might be out of harm's way, and Elg directed to withdraw the cross stakes, and afterwards to stir up the beast with a long pole, previously prepared for the purpose.

In the meanwhile I stationed myself immediately above, and within a few paces of the den, armed not only with my own gun, but with Elg's, which was lying in readiness at my feet;

and I had not long to wait—for the instant the pole touched the beast, and before Elg's exclamation "She's coming, Sir!" was well out of his mouth, she, with the rapidity of thought, stood all but bolt upright before me; her jaws were distended, and her eyes, which seemed to protrude out of their sockets, shot forth fury and revenge. Had it not been for the embankment, she would at once have made her exit; but this being only partially removed, she could not clear the impediment at a single bound; and she had no opportunity of making a second, for at the instant of her appearance a bullet through the back of the head caused her to sink lifeless to the ground.

The old bear was left *en cache;* but the cubs, three in number, were at once conveyed to Löfskogsåsen; and though at the time of their capture they were only a few days old, we were enabled, by extreme care, to rear two of them. One is now in the possession of Sir Henry Hunloke, at Wingerworth Hall, in Derbyshire; and owing to good feeding he has grown enormously. With the exception of the bear at the Zoological Gardens, indeed, I much doubt there being a larger in England; and what is remarkable, he is as tame as ever. On a recent visit to the Baronet, I placed my hand in the beast's mouth, which he slobbered over as affectionately as in olden times.

T. Wingate del. _ E. Walker lith.

Day & Son Lith^rs to The Queen

HE'S COMING SIR!

CHAPTER XXV.

PERSONAL ADVENTURE—FINDING THE BEAR—HE CHARGES—COUNTERFEITING DEATH—MANNER OF ATTACK—THE BEAR THE VICTOR—HE DIES—ADVANTAGE OF BEING CROPPED.

THOUGH during my sojourn in Scandinavia I was in at the death or capture of one hundred and two bears, the larger portion of which were bagged when I was alone, so to say; and though often in considerable jeopardy, I was never wounded by those beasts excepting on a single occasion. The circumstances under which the accident occurred were as follows:

On Saturday the 29th of March, 1844, in company with Elg and two others, I was in search, in the more northern parts of the Wermeland Finn-forests, of a large bear that had for several preceding years committed much havoc amongst the horses and cattle. He was not actually ringed; but his track having been seen very late in the autumn, we had reason to believe he was lying thereabouts. The snow was fully two feet in depth; but owing to the *Dags-meja**—

* This word is a corruption of *Dags-midja*, literally the middle of the day.

that is, the effect of the noon-day's sun upon snow or ice in the spring—it was mashy, so to say, and consequently not only the Skidor, but the dogs sunk nearly to the ground.

Our little party was drawn up at a distance of from one hundred to one hundred and fifty paces apart, on the face of a rather lofty and deeply-wooded hill. My station was near to the centre of the line; and as we were beating the forest before us, one of the dogs opened at some fifty paces in advance, in a manner that assured me it was the bear he had fallen in with. From the advanced period of the season, and the very unfavourable state of the snow, I feared that if the beast was once fairly on foot we might have very great difficulty in killing him. In all silence I therefore pushed forward as fast as I could, in the hope of getting a shot prior to his leaving the lair; and when near to it, I took off my Skidor, as well because some fallen trees obstructed the way, as that my movements might be more noiseless.

The bear was lying near to the summit of a little knoll, and at the outer edge of a thick brake; but on the side I approached him there was a small opening in the forest, so that my view was nearly unobstructed. Owing, however, to his being couched beneath a sort of bower, consisting of several of the adjacent young pines, which he had broken or torn down with his teeth and claws—a form of lair, by the bye, such as I never saw before or since—I was not aware of the beast until within some eight to ten paces of his bed, and then little more than his head, which was obliquely towards me, was visible; and though the dog stood baying immediately near to him, and though fully awake, as I saw by the rolling of his eye, he had not,

as yet, at all changed his position; but, from the action of his head, he was evidently on the point of moving off.

Being perfectly prepared, and my gun on the full-cock, I, as soon as I caught sight of the beast, levelled at the centre of his skull; but some boughs intervening, which it was to be feared might intercept the ball, caused me to desist from firing. The next instant, however, I took rather a snap-shot at the outer side of his head, beyond the boughs in question. But the momentary delay caused by shifting my aim was very unfortunate; for in the interim he had seen me, and as I pulled the trigger he was in the very act of bolting from his couch; and my aim in consequence was very uncertain. Indeed, I am inclined to believe I missed him altogether.

Be that as it may, on the discharge of my gun the beast at once rushed towards me. I had still left my second barrel, with which I ought, no doubt, to have destroyed him; but owing to his undulatory motion I could not, though I attempted more than once, catch a satisfactory sight; and it was not until he was within three or four paces that I fired, and then somewhat at random. Though my ball in this or the former instance (for in the one or the other, as subsequently ascertained, it went wide of the mark) wounded him very desperately, it having entered his neck near the shoulder, and passed into his body; yet it was not sufficient, unfortunately, to stop his course, for in a second or two he was upon me—not on his hind legs (the way in which it is commonly supposed the bear makes his attacks), but on all-fours, like a dog; and in spite of a slight blow that I gave him on the head

with the muzzle of my gun—for I had no time to apply the butt—he at once laid me prostrate.

Had not the beast been so very near me when I fired the second barrel, it is probable, from his wounded state, I might have got out of his way; but flight on my part, from his near proximity, was then too late; and once in his clutches, and now that my gun was discharged, totally unarmed, the only resource left to me was to turn my face to the snow, that my features might not be mutilated, and to lie motionless; it being a generally received opinion in Scandinavia, that if the bear supposes his victim to be dead, he the sooner desists from his assaults. In my case, however, though I played the defunct as well as I was able, the beast mauled me somewhat severely, about the head in particular; my body also suffered greatly from his ferocious attacks, which extended from the neck and shoulder downwards to the hip. But he did not attempt in any manner to hug or embrace me, as we in England seem to imagine his custom to be when carrying on offensive operations; nor did he seemingly molest me in any way with his claws. All my wounds were, to the best of my belief, inflicted with his fangs.

This goes somewhat to corroborate the idea that commonly prevails in Sweden, that in attacking a man, and beyond holding him fast with his claws, the bear never—in the manner of the lion or the tiger—strikes with his paw, which they say is his usual habit when making an onset on horses or cattle.* If this be true, it is well; as other-

* The notion is entertained by many in Sweden that the bear's abstaining from using his paws towards the human race, is owing to a special interdiction of Providence.

wise, from the very great muscular power of his arm, annihilation would probably quickly follow the blow. But after all, no inference can fairly be drawn from my case, as the beast's forbearance towards me might have arisen simply from my remaining quite passive. Had I, on the contrary, been on my legs, and offered resistance, I might possibly have felt, not only the weight of his paws, but the pressure of his embraces.

Neither at the time of receiving my first fire, nor whilst making his rush, did the bear, as is usually the case when enraged, utter his usual half-roar, half-growl. Even when I was lying at his mercy, no other than a sort of subdued growl, similar to that of a dog when disturbed whilst gnawing a bone, was made by the beast; and so far from coming at me with open jaws, as one would suppose to be the case with a wild beast when making his onset, his mouth at the time was altogether closed.

The pain I suffered from his long-continued attacks on my body was bearable. When he had my limbs in his jaws, it more resembled their being stuck in a huge vice than anything else; but when his jaws grasped, as they did, the whole crown of my head—during which I distinctly felt the fleshy part of his mouth to overlap my forehead—and his fangs very deliberately scored my head, my sufferings were intense. The sensation of his fangs slowly grating over the bare skull, was not at all that of a sharp blow, as is often the case when a wound is inflicted, but rather, though very much more protracted, the craunch one feels during the extraction of a tooth.

From certain circumstances, I have reason to believe the bear continued to maltreat me for nearly three minutes. As I

perfectly retained my senses the whole time, my feelings, whilst in this horrible situation, are beyond the power of description. But at length the incessant attacks of my gallant little dog drew the beast's attention from me, and I had the satisfaction to see him retreat, though at a very slow pace, into the adjoining thicket, where he was at once lost to view.

Immediately after he left me I arose, and applied snow by the handful to my head, to stanch the blood which was flowing from it in streams. I lost a very large quantity, and the bear not a little, so that the snow all around the scene of conflict was literally deluged with gore.

From the wretched state of the snow and the distance, my comrades did not join me until a minute or two after my antagonist had retreated, and when I was on my legs bathing my wounds. Elg, whom I had called twice by name at the instant the bear was about to close with me, had no idea I was in jeopardy, but merely that I required his aid in killing the beast. Under any circumstances, it would have been impossible for him to have rescued me; for at the time of the mishap he was considerably below on the hill-side, which was precipitous; and a dense brake, moreover, intervened. When therefore he came to the spot, and saw the blood on the snow, he, without noticing the state I was in, looked about him and inquired for the carcase of the bear; and was taken a good deal aback when he found that in this instance it was the beast, and not myself, that had proved the victor.

At first, from the pain of my wounds, and the weakness consequent on loss of blood, which ran from my head so as almost to blind me, I thought myself much more hurt than

I was in reality and disabled for that day at least; so that on my comrades coming up, I forthwith directed Elg to put an end to the wounded bear, whose tracks were deeply marked with blood, which he effected in about ten minutes, and within two to three hundred paces of the spot where the encounter between us had taken place; and a very few minutes afterwards, having in the interval greatly recovered myself, and put my gun—which in the *mêlée* had been buried in the snow—in order, I rejoined him on my Skidor.

Our prize,* a male, was emaciated, from age as we imagined, and his fangs either broken or greatly blunted. To the latter circumstance my preservation, under God, was probably attributable; for had his fangs entered my person in every place where they left indentations, I must have been literally torn to pieces.

As it was, I escaped wonderfully. My body, to be sure, was covered with severe contusions—for the skin being only slightly raised, wounds they could hardly be called; two or three days subsequently, indeed, the whole of my left hip and the adjacent parts were perfectly black. My right hand and wrist were a good deal hurt; for at the commencement of the affair—how, I know not—I got my hand into the mouth, and even partially down the very throat of the beast, where it seemed as if embedded in slaver. My skull, for a considerable extent, was laid bare in two places: one wound, by the doctor's account on the following day, being eight, the other nine inches in length—though parts of both were, of course, superficial; but from my hair

* Now in the British Museum, to which institution it was presented by the Earl of Selkirk.

being cut very short, and the fangs of the beast thus readily passing through it, I escaped being scalped, as would inevitably have happened, had it been worn long after the fashion of the Swedish peasantry.

Happily, however, I was so little disabled by the injuries inflicted on my person by the bear, that I contrived to make my way the same evening to my quarters, a distance of seven or eight miles, and with the exception of the last two, when I obtained a horse, either on Skidor or on foot. But for a long time subsequently I suffered much from my wounds, and weakness arising from loss of blood; not sufficiently so, however, as to prevent me—though it was certainly a great effort—from taking the field again four days afterwards.

CHAPTER XXVI.

THE CHOLERA—PREDESTINATION—REMEDIES—ESCAPE OF DRUNKARDS—THE PEST IN GOTHENBURG—THE INFIRMARY—SYMPTOMS—FLIES—TREATMENT—EFFECTS OF ELECTRICITY—WONDERFUL RECOVERY—DEPLORABLE STATE OF THE TOWN—WANT OF COFFINS—PRAISEWORTHY CONDUCT OF THE POORER CLASSES—CONTAGIOUS OR NOT?—FEAR A PREDISPOSING CAUSE—SELF-POSSESSION A PRESERVATIVE—PHENOMENA—THE FACULTY.

LATE in the summer of 1834, during my residence at Ronnum, reports were abroad that the Asiatic cholera, after committing terrible destruction in various parts of Europe, had at length reached Gothenburg; and these rumours proved but too true, for in a short time the disease raged with fearful virulence in that devoted town.

Some days subsequently it made its appearance in Wenersborg, where also it committed much havoc, especially amongst the lower classes; for out of a population of about two thousand, near two hundred perished.

Within a week afterwards the pestilence broke out in the cottages about Ronnum. Many individuals were seized, nearly the half of whom were carried off; sickness and death, indeed, were rife within a few paces of my own door; one family, consisting of five individuals, perished altogether;

and my near neighbour at Önaforss, M. Norström, lost, I believe, eleven of his people out of less than fifty.

Whilst the epidemic was raging the peasantry showed much apathy, and pursued their usual avocations as if careless of what might happen. But this indifference to peril arose in great degree from a religious feeling, or rather, perhaps, from their inclining to predestination.

Nearly in front of, and within gunshot of my residence, where four roads met, stood a cottage, which during the prevalence of the cholera was converted into a *Död-hus*, or receptacle for the dead. One Sunday several corpses were lying on the ground floor of the building, waiting interment. A number of people returning from church were desirous of seeing the bodies; but not being permitted to enter the house, or to get a good peep through the windows, about which they congregated, they actually smashed several panes of glass, that they might obtain a better sight. Though remonstrated with, and warned of the danger of thus coming so immediately in contact with the dead, their only reply was: "*Om det är Guds vilja att vi skole dö, så dö vi*"—that is, "*If it is the will of God we should die, we die!*"

Though surrounded by the sick and the dead, I and mine escaped. As regarded the servants, this was less surprising; for knowing the feelings entertained by their class, and that they were consequently just as likely to court danger as to shun it, they were strictly confined to the house and garden, and not allowed to communicate with any one. But even when the malady was at its worst, I myself went about much as usual; often, indeed, when fishing or shooting, up to the middle in water: conduct, which, being contrary to all rule, would be considered by medical men as tempting Providence.

I maintain, however, that during pestilence, a man risks less by following his every-day avocations than by moping within doors, where, from his thoughts constantly dwelling on melancholy themes, mind as well as body becomes enervated, and as a consequence, he is just in a state to be susceptible of disease.

Though the cholera happily passed me by, I was once, for a moment, in no little fright. In the dead of the night I was suddenly roused from a sound slumber by a rumbling sort of noise, betokening that commotion was going on in the interior, of either man or beast; and as no one slept in that part of the house but myself, half-asleep as I was, I fancied that it proceeded from my own stomach, and was a prelude to the cholera. When thoroughly awake, however, and convinced that I myself was no party to the strange turmoil, which still continued, I set about exploring the room, when the mystery was soon cleared up; the author of the alarm turning out to be a huge tom-cat, that had snugly ensconced himself under my bed, after feasting on green gooseberries or some other indigestible matter.

On another occasion I felt great apprehensions for the boy, my attendant. We were duck-shooting, and both very wet, when all at once the poor fellow complained of violent internal pains, and sunk helplessly to the bottom of the punt, where he lay in great agony. Naturally enough I imagined he was seized with the cholera; still, hoping it might be a simple stomach complaint brought on by exposure to wet and cold, I raised him on his legs again, when we pulled for the shore as quickly as possible. Here a good half-handful of pepper-corns were procured, which after being roughly pounded between two stones, he gulped down in a joram of brandy (the panacea in Sweden for all disorders) and then started in a

cart for home, distant from twelve to fourteen miles. The effect of this elixir was magical: by the time we reached Ronnum, all symptoms of cholera or other intestinal commotion had entirely disappeared, and the boy was as well as ever.

In Wenersborg, and the adjacent districts, the usual remedies for the cholera were emetics, copious bleeding, and sudorifics of various kinds. Though amply provided with medicines, recommended by the faculty, for the use of my people, I for my own part, agreeably to a recipe—obtained I know not where—had determined on the first symptoms of the malady, to take twenty grains of calomel, combined with an equal quantity of jalap; and in consequence I was never without two or three of these gigantic boluses in my pocket!

I possessed a little fishery, as said, at Källshaga. But as at this period I had other matter to attend to, my rod was generally handed over to the fisherman, who came home one day in considerable trepidation, stating he had been so annoyed by the *Död-stank*, or death-stink, as he expressed it, perceivable on the water, that nothing should induce him to go there again. Nor were the poor fellow's fears altogether imaginary; for the weather being very close and sultry, and the burial-ground at Wenersborg perhaps not more than a mile or so distant, it is quite possible the breeze wafted the horrible effluvia thither from the new-made graves, the rather, as the coffins in many instances were only slightly covered with soil.

As, however, the fishery was of some moment to me, I was obliged, from that time forward, to use the rod myself; and though I cannot positively corroborate the man's statement, I must admit, that early in the morning, or late in the evening, when the mist was hanging over the river, I have

occasionally perceived what I fancied was the odour of the charnel-house.

In my neighbourhood opinions were much divided as to whether the cholera be infectious or not. I myself am a decided contagionist, my conclusions being drawn from the following, as well as other similar facts, which on this occasion and at an after-period, came more or less under my own personal observation.

Wenerns-Näs, or the Peninsula of the Wenern, situated at some few miles from Ronnum, contains several hundreds of inhabitants, and is connected with the mainland by a narrow isthmus. Here, at the breaking out of the cholera, a strict Cordon was established by the residents; and though very many individuals died immediately beyond the line, and in the adjacent parts, only two perished on the peninsula itself! Both of these cases occurred a very little within the line, and in each instance previous contact with the sick or dead beyond it, was distinctly traceable.

There were several determined drunkards near me, who caused every one much annoyance. As when the cholera broke out, however, it was an understood thing, that intemperance was nearly certain death, we naturally expected that those who chanced to survive, would no longer be troubled with these our toping neighbours. But this was a grievous mistake; for, though very many sober people were swept away, nearly every sot escaped.

How this could have happened, I am at a loss to conceive, unless it be, that men whose cares are "morning, noon, and night drowned in the bowl," have no time for apprehension; for fear, it is said—and I fully believe it—kills nearly as many as the cholera itself.

The mortality from cholera in Gothenburg was probably, in proportion to the population (some twenty thousand), fully as great as in any other place in Europe.

Although France, Germany, and even Russia, had suffered fearfully in turn from the fell disease, still the inhabitants of Gothenburg, relying on the healthy state of the country, and the efficacy of their strict quarantine laws, which three years previously were believed to have saved Sweden from the pestilence, indulged in the hope of being altogether exempted. But these pleasing expectations were fearfully disappointed!

The summer of 1834, when the contagion broke out, was remarkable for its great heat. During the month of July the thermometer ranged between 80° and 90° of Fahrenheit, and no rain had fallen for a long time; and it was remarkable, that the leaves of the trees in the vicinity of the town turned yellow, and dropped as if the autumn had been far advanced: a sign that there was something in the atmosphere that suited neither vegetable nor animal life.

As is usually the case in hot summers in Sweden, much diarrhœa prevailed; and as this disorder is frequently accompanied with cramp and great prostration of strength, it was at first considered the patients might be labouring under an aggravated form of common cholera. But the number of seizures, and the rapid transition to a state of collapse, together with other unmistakable symptoms, at length convinced the faculty, who at first were divided in opinion, of the true nature of the disease. This was towards the end of July.

The town being totally unprepared for the dire visitor, consternation, when the truth came out, was universal; not a few, indeed, of the leading inhabitants, whose duty it was to

have stood in the front of the battle, became so terror-stricken—the "quicksilver," as a friend quaintly expressed it, "having fallen below their knees"—as fairly to "turn tail" and run away! Still there were very many amongst the better classes who behaved nobly on the emergency, and encouraged their fellow-citizens to exertion for the general good. Unfortunately, however, General Count Rosen, the Governor, a man of great decision of character, was absent at the time on official duty, so that there was no one on the spot properly to direct their praiseworthy efforts.

In the meantime the pest spread with fearful violence; and nothing having been previously arranged, the hurried preparations made on the spur of the moment were totally inadequate. Though several hospitals were subsequently established, the infirmary in the first instance was, I believe, the only public building for the reception of the sick; and this, as may be supposed, was soon filled to overflowing. It is said, indeed, that at the first breaking out of the cholera, hundreds of sick, for the want of accommodation within doors, were deposited in the lobbies and outbuildings.

The infirmary at this period was, in truth, a horrible abode: death and despair were depicted on the countenances of the poor inmates, and their cries and moans were distinctly to be heard in all the surrounding houses.

"The outer entrance to this establishment," so writes a friend, who in company with an acquaintance of his visited it within little more than a week after the outbreak of the pestilence, "was blocked up, partly by *Sjuk-bärare* (those whose special duty it was to convey the sick to the hospitals), who were occupied either in bringing in poor creatures, there to find their graves, or in setting forth in search of fresh

victims; and partly also by people who, with tears and lamentations, were imploring that a litter might be provided for a parent, a child or a relation, as the case might be. But the number of applicants and the confusion were such, that few were fortunate enough to obtain the object of their wishes. All the wards were indeed so overcrowded already, that it was not until death had done its work, that space could be found for new inmates.

"Having forced our way through these miserable and bewailing people into the spacious court in front of the infirmary, we found it filled with trusses of straw and rolls of coarse canvas, of which materials a number of women were occupied in forming pallets for the sick. Hence we proceeded into the principal apartment of the building itself, which was filled with cholera patients, numbering from seventy to eighty. Many were dead, and others in a dying state. The former, as soon as life was extinct, were borne to another chamber, to leave room for other victims.

"I had then an opportunity of closely observing the many and various symptoms which this disease assumes. Some patients evinced severe pain; others were lying as in a quiet sleep or trance, without showing signs of consciousness. On the countenances of many death was pictured with a dark blue hue and *brustna* or glassy eyes; but even amongst these some were very quiet, whilst others, on the contrary, exhibited great restlessness. I particularly recollect a blacksmith, a stout powerful man, whose chest heaved and laboured terribly, and who, to judge by appearances, was on the very verge of dissolution; but this poor fellow eventually recovered. Another patient laboured under delirium, and was so violent that two nurses were unable to keep him in

his bed. Confusion seemed to prevail everywhere; and as the attendants were fully occupied in bearing out the dead, or in bringing in fresh patients, hardly a minute of their time could be devoted to the proper attendance on the sick.

"The windows of the chamber wherein the dead were deposited, which faced the street, stood constantly open for the sake of ventilation. Myriads of flies, with which the air was filled, after feasting on the dead bodies, spread themselves throughout the town. And had not the faculty pronounced the disease non-infectious, its dessemination might have been apprehended from this cause alone.

"The windows of the sick-ward also remained always open, that the poor patients might benefit by fresh air; and the passers-by could distinctly hear the voice of the clergyman whilst engaged in administering the Holy Sacrament to the sick and dying; which circumstance was believed to increase in no immaterial degree the fears of the already dispirited people.

"For several days, indeed, whilst the cholera was at its height, the churches in the town were always open, that the passers-by might, if they wished, receive the Communion. It was in the nineteenth century, that people thus sought in the hour of distress and danger, to make terms, so to say, with the Almighty, for the remission of their sins, and the inheritance of eternal life. Had this crisis happened in the fifteenth century, he who held in his hand St. Peter's keys would have been enabled to gather a rich harvest by the sale of indulgences."

The common people, left thus in great degree to themselves, perished without medical advice; which, indeed, was nearly unattainable, from the doctors being few in number,

and occupied both night and day at the hospital, or in attendance on their own private patients. Harassed incessantly, and deprived of their natural rest, the medical men looked like spectres; and though they all exposed themselves personally in every quarter, and with the most perfect devotedness, yet their exertions were necessarily confined to comparatively few out of the thousands who at the time required their assistance.

The more the plague spread, the more fierce and unmanageable it became. Infected persons were generally carried off in six to eight hours, and the deaths in this small population amounted at one time to about three hundred a day!—"The progress of the disease was so rapid, and the necessity of prompt interment so great," writes another friend, "that a young relative, for whom I was guardian, sickened, died, and was buried even before I could hear of her seizure, although I was in town daily."

The usual symptoms of the cholera were livid countenance, contraction of features, sunken eyes, cramp of the stomach and legs, vomiting and diarrhœa. In the hospitals, the first thing done with the patient when in this state, after putting him into bed, and administering the needful medicines, was to have his limbs constantly rubbed or shampooed, by one or more persons, until the cramps diminished and profuse perspiration ensued; when this was the case, the disease usually abated, the eyes resumed their natural appearance, and the skin its proper colour. In spite of every care and attention however, fully half of the sick perished. This, indeed, seems to have been the case in all places.*

* Farther particulars respecting the symptoms and treatment of the cholera will be found in the Appendix.

According to the Rev. — Rhodin, Rector of the parish of Ermelanda, a very remarkable cure was effected by *electricity*. "An individual of the name of Sven Nilsson," so he tells us, "was suffering from a severe attack of cholera. A thunderstorm having occurred, and the electric fluid having entered the chamber in which he lay, and killed his two daughters, he was instantly restored to health."

From the great mortality, coffins could not be procured in sufficient numbers. Large and deep trenches were therefore made, to which the bodies were conveyed during the night, and buried with quicklime. At first the ordinary forms in the burial of the dead were duly observed; but, as the disease spread, these were so far dispensed with as that only once in twenty-four hours the funeral service was read over all the corpses at one time.

At the Gothenburg Cemetery, and everywhere in cold countries, is a building (dead-house) where during severe weather, when the ground cannot be conveniently opened—and frequently, indeed, on ordinary occasions—the dead are deposited prior to burial. Soon after the breaking out of the cholera this building was crammed full of coffins which, owing to the numerous interments constantly going on, could not be removed for several days. When the doors were at length opened, the scene was too horrible for description. The effluvium was dreadful, and from the extreme heat of the weather, decomposition had taken place to such an extent, that the shoes of the individuals employed in removing the coffins were partially immersed in the putrid matter that had exuded from the bodies.

It is to be feared that whilst the disorder was at its height, individuals were not unfrequently interred alive. Dreadful

stories (for the truth of which I vouch not) are told to this effect. Amongst the rest, that of a poor fellow, who, on resuscitation, found himself staggering about in his winding-sheet, in a dank, dark, and loathsome cellar, where along with several dead bodies, he had been stowed away, preparatory to interment!

In the public hospitals every precaution was taken to guard against this evil. "When persons were supposed to be dead," to quote the words of my friend Major Barck, of the Swedish service, who had more than one of the cholera hospitals under his special superintendence, and whose fearless exertions are deserving of all praise, "they were covered with a sheet, or otherwise, that their disfigured countenances might not terrify the sick in the adjoining pallets. In this state they remained three or four hours, when, by means of a blow-pipe, fire was applied to the pit of the stomach, to ascertain if, possibly, vitality remained; and it was not until the medical attendant was perfectly satisfied on this point, that the bodies were allowed to be removed elsewhere."

But in spite of every care, singular escapes occurred even in these establishments. "On one occasion," said Major Barck, "a blacksmith named Hellstenius, was believed to be dead, and his face veiled in the way described. After the man had lain in this state for several hours, it happened that the doctor, when attending to a patient in an adjoining bed, noticed that the covering over Hellstenius's countenance was partially removed. He went up to the supposed corpse, and fancied he perceived a slight twitch in the eyelids. A jug of water was standing near, the contents of which the doctor, raising his hand as high as possible, poured in a continuous stream on to the pit of

the stomach. He thought the man again moved, and to make sure on this point, recourse was had to the blow-pipe. On the application of this very severe test, Hellstenius gave unequivocal signs of life. Shampooing and other remedies were now immediately resorted to, and in a short time he came to his perfect senses."

"I arrived at the hospital," the Major continued, "shortly after this remarkable resuscitation, and stood at the foot of the bed gazing at Hellstenius; on which the poor fellow, fixing his eyes full upon me, exclaimed with a loud voice: 'God bless the doctor, who stands there; without his assistance I should now be lying in the dead-house amongst corpses!'" It is gratifying to add, that this man eventually left the hospital restored to health, and that within the last few years he was alive and well.

The state of Gothenburg at this period was very deplorable. "I should have executed your commission," writes an acquaintance, "but could not do so, for the pestilence that now rages. Two individuals have been victims in my house, and two others are lying at death's door. The town and suburbs present a dreadful scene. People die like flies. Wailing only is heard, and nothing is seen throughout the livelong day but the sick borne on litters to the hospitals, and the dead to their last home. The rumbling of the hearses under my window, is almost the only sign of life in the town."

"To send you a supply of medicines from this place," writes a countryman, holding an official appointment, "is quite out of the question. After about fourteen thousand deaths, and God knows how many cases, you may conceive the supplies of doctors' stuff are exhausted. It

was difficult to keep alive at one time. The air was tainted by the sick and the unburied dead. Fear, bad ventilation, and incautious contact with the dead, must have concurred in rendering whole families victims. In a great many instances corpses have lain in private houses from twenty to thirty hours. Such, unhappily, was at first the case in the hospitals."

"Coffins were at a premium, when the cholera was at its height," said my informant. "We hailed their arrival, and they were paraded through the town in hundreds. The want of them was so great, that the town carpenters could not furnish an adequate supply; and recourse was had to the Commandant at Elfsborg, who employed the convicts in constructing numbers out of rough unplaned boards. They were sent up in boat-loads, and deposited on the quay opposite to my window. At first they were taken away as fast as landed, but finally they accumulated as the disorder decreased. And I used to remark that I never anticipated pleasure from having a pile of coffins in prospect; but in this case it was no small satisfaction, being the best proof of the abatement of the cholera.

"At the first appearance of the disorder, it was much more malignant than towards its close; almost every one who was then attacked perished. And it was not unusual to order both coffin and hearse as soon as the disease appeared. This occurred in a house of mine, where one of the maids was taken ill, upon which a coffin was immediately brought home, and the hearse ordered for the evening. At nightfall the undertakers came to carry away the corpse, went straight into the room, where, still in the

full possession of her senses, the poor girl was lying, and to her great horror told their melancholy errand. In spite of her protestations that she was not dead, the fellows, however, were hardly to be prevailed upon to leave the house empty-handed! This young woman subsequently recovered; but when she saw the coffin intended for her, which was still remaining in the yard, she expressed great indignation at its *unblacked* and *uncoffin*-like appearance, and at its very confined dimensions. 'It was so short,' as she expressed it, 'that unless her legs had been first cut off, she could not have been laid in it in a decent manner.'"

But the poor girl was not worse fitted in this respect than many others. During the prevalence of the disease, indeed, I heard of the end of a coffin being knocked out, the better to accommodate the long legs of a shoemaker's apprentice, who was carried, booted as he died, to the grave.

The conduct of such of the higher classes as remained during the cholera, is described to me as having been exemplary. "Many spent their time in prayer and meditation, preparing their minds to submit with resignation to the will of God. Owing probably to greater attention to diet, and to the ventilation of their houses, as also to better medical advice, few suffered in proportion to their poorer neighbours."

The behaviour of the lower classes was also much lauded by the same authority, even under the extreme of suffering. "They gave way to no excesses: inordinate drinking, to which in common times they are much addicted, was laid aside; there was no riot, no despair; and the poor man was found administering to the wants of his fellow-creatures with

patience and assiduity: a trait in the character of the people, which redounds highly to their honour."

Scenes of a revolting nature were, however, by no means uncommon at this period, more especially among the Sjukbärare. But as no inducement, either pecuniary or other, could prevail on decent people to undertake the degrading and perilous office, it was as a consequence filled by the very dregs of society.

These fellows, who were almost always inebriated, were not only frequently to be seen staggering from side to side under their pitiable burthens, and stopping at public-houses to get ardent spirits; but when resting on the way, they would seat themselves on the litter by the side of the poor patients, and troll forth songs of their own composition, the substance of which was the cholera and its unhappy victims!

The conduct of the drivers of the dead-carts, and of the gravediggers, was almost equally disgusting. The former were seen nearly insensible from drink, lying at their length on the very coffins, and leaving the horses to find their way to the burial-ground how they could; and the gravediggers, from the like cause, staggering to that degree as to be hardly capable of holding the spade.

As well whilst the cholera was raging in Gothenburg, as since, it was a greatly mooted question whether the disease be infectious or not.

"Where so much is to be said on both sides," such were the words of a correspondent, "it is difficult to form a decided opinion. There are certainly instances, such as that mentioned by you at Ronnum, where one has reason to believe a Cordon has kept out the contagion, but I dare say there are more of its having over-

leaped all barriers. The probability is, that some persons are susceptible of the disease, and others not so; and that the former may escape if they keep within a well-guarded Cordon, whilst the latter are safe even in the midst of the pestilence. But how account for a particular spot being entirely exempt? And that was the case with the district situated between Majorna and Gamla Warfvet (the Gothenburg Wapping), both of which suffered dreadfully, more especially as the district in question was inhabited principally by the lower classes, and those of the most depraved habits, and yet not one was carried off."

Though people might differ in opinion as to the infectious nature of cholera, every one seemed agreed that fear, anger, excitement of any kind, sudden surprise, &c., predisposed to the disease.

"A much respected gentleman, and a member of the Sanitary Committee," Major Barck stated to me, "called one day on an acquaintance, where he was very *abruptly* told, that one of his most intimate friends and comrades—an officer belonging to the garrison, who was previously in perfect health—had a few hours before died of the cholera. The intelligence had such an effect upon the poor man, that he was instantly seized with shivering—his face became fearfully discoloured, and on the succeeding day he followed his friend to the grave." And the Major added, that "similar instances were frequent in families of respectability."

All had likewise the full impression that in the same ratio that fear, &c., predisposed to the cholera, so did coolness and self-possession act as a preservative against infection.

Few, for instance, of the paid attendants—volunteers, so to

say—at the town hospital, in which category are included the nurses, the laundresses, and even the wretched Sjukbärare, were infected. And the like was the case in the military hospitals, where the duty of attending on the sick was voluntarily performed by men from the ranks; whereas previously, when the task had been compulsory on the soldiers, almost every man perished!"

Again—"I and eleven others," writes a friend, "spontaneously undertook the management of a soup-kitchen. We were, of course, constantly exposed to contact with the relatives of the sick, and with the convalescents themselves; but excepting one individual who took fright, kept at home, sickened and died, we all escaped."

After the return of Count Rosen—which occurred soon after the breaking out of the pestilence, when several cholera hospitals, amply provided with everything from the Government stores, had been established, and additional medical aid obtained, consisting chiefly of young men from the provinces, or from Denmark—the spirits of the people began to revive. Owing, perhaps, somewhat to the energetic way in which these and other sanitary measures were carried out, the pestilence gradually subsided; and, after having raged for eight or nine weeks, terminated, or nearly so, towards the end of September; not, however, before it had swept off upwards of three thousand souls, or a seventh part of the inhabitants.

High and low, alike, perished on this occasion. General Count Rosen, whose praiseworthy and fearless exertions nothing could exceed, was, amongst others, a victim. Nearly at the close of the visitation, public matters called him to Trollhättan, where we accidentally met; and, though he

professed to be in health, his looks were haggard and care-worn. He was already, probably, stricken by the plague, for three days afterwards he was numbered with the dead!

In 1850, the cholera again visited Gothenburg, though with less fatal effect than in 1834. Profiting by what had occurred on the former occasion, needful and timely preparations were made; and, excepting in a few solitary instances, when "the quicksilver fell below the knees," every one was at his post. The public mind was thus tranquillized; and, though some sixteen hundred sickened, and the half of that number died, everything went on in the town as if the enemy had been at a thousand miles distance.

It may be deserving of mention, that in some places in Sweden, where cholera raged at this time, phenomena occurred for which it is difficult to account. Dr. Willman assures me, for instance, that soon after the disease broke out in the town of Malmö, where it caused great havoc, the jackdaws, which breed in large numbers in the church steeple, *simultaneously* disappeared; and that it was not until after the cessation of the disorder that they returned to their old quarters. The same was also the case with the sparrows. The fish on the coast, moreover, especially on one particular day, came up dead to the surface, in large numbers.

The Doctor also assured me, that when he was in Finland in 1848, in which country the cholera was then raging, the herrings, in large quantities, were frequently found dead in the Gulf of Finland.

When the cholera had all but disappeared in Gothenburg, the Governor, M. Fåhræus, whose conduct under the heavy

infliction was deserving of all admiration, gave a parting entertainment to those persons who had more particularly exerted themselves whilst the epidemic lasted. Amongst a variety of toasts, His Excellency proposed three, specially applicable to the occasion. The first was to the *Sundhets-Nämnd*, or the Members of the Sanitary Committee; the second, to the *Sundhets-Byrå*, which may be rendered, the Working Members of the same; and the last, to the *Faculty*, which he prefaced by a speech to the following effect:—

"My third toast, is in honour of the medical gentlemen present; and amongst them the volunteers who came to assist us in contending against this scourge. I arrange my toasts in this wise, because I venture to liken a pestilence to an enemy, who makes an inroad into a country, and devastates it with fire and sword. The Sundhets-Nämnd answers to the ministry of war of the land invaded; the Sundhets-Byrå to the commissariat; and the members of the faculty to the armed host actually opposed to the foe. Gentlemen, the health of the Doctors! whom I most gratefully thank for the courage and unwearied zeal with which they have contended against the enemy of our country!"

CHAPTER XXVII.

THE WOLF — INCREASE IN NUMBERS — ONLY ONE SPECIES — REMARKABLE LITTER — RABIES — DREADFUL CONSEQUENCES — FEARLESS OF FIRE — COWARDICE — AUDACITY — FIGHT FOR A GOAT — ENMITY TO DOGS — DOGS IN PERIL — EXTRAORDINARY VORACITY — EASILY DOMESTICATED — SAGACITY — ATTACHMENT TO A DOG — PIG-TAILS IN REQUEST — SANGUINARY ONSLAUGHTS.

WOLVES, as said, were pretty numerous in my neighbourhood. Some few, indeed, had their haunts in the hills of Hunneberg and Halleberg, where, however, from the almost inaccessible nature of the ground, they were difficult of access. Occasionally I fell in with these beasts. Once in the summer time, when returning at mid-day from the hamlet of Sollebrunn, situated at about twenty miles to the southward of Ronnum, three full-grown individuals walked coolly across the high road within forty to fifty paces of my vehicle; but the gun being in its case, there was no time to discharge it. Indeed, had I fired, it would probably have availed little, the piece being only loaded with small shot.

Wolves are also common throughout the greater part of

Scandinavia. From time immemorial, indeed, they have been a standing grievance. Olaus Magnus, who flourished in the sixteenth century, tells us that in his day the country was overrun with those beasts, and Pontoppidan that, "they were the plague and torment of the land."

The extermination of wolves in countries like Sweden and Norway, covered with boundless forests and mountain-fastnesses, though a consummation devoutly to be wished, is next to an impossibility. Still, one would imagine that persecuted as they are in every way, their numbers would be materially diminished. But this is not the case. Indeed, it would appear that, on the contrary, they are rather on the increase than otherwise.

To what cause the increase of wolves is attributable is hard to say. Not improbably, however, to migrations from Russia and Finland, whence they may have been driven by an increase of the population or other causes. The Lapps have the notion that the larger portion of the wolves, which persecute their herds of reindeer, are visitors from these countries. And why may not this be the case?—for it would seem as if they came originally from the eastward. So it may be partly inferred, at least, if what we are told by Bishop Pontoppidan be true—namely, that "prior to 1718, wolves were unknown in the bishopric of Bergen (the most western district of Norway). Filefield was then the bound of these creatures' devastations; they never passed that mountain, till about the above year, or at the end of the last war, at which time the armies marched; and all manner of necessaries of life were transported over that mountain in the winter, and the insatiable wolf followed the scent of the provisions."

But before making farther mention of the wolf, it may be well to say a few words respecting his natural history—a subject, as with the bear, partly treated of in my former work.

THE WOLF.

The general opinion is, that only the common wolf (*Varg*, Sw.; *Canis Lupus*, Linn.), as depicted above, exists in Scandinavia. Professor Nilsson, who at a former period rather imagined the black wolf (*Canis Lycaon*, Gmel.) to be indigenous to the peninsula, has now, I believe, come to the same conclusion.

The wolf breeds only once in the year. The female is said to carry her young for ten weeks, and to bring forth at the end of the month of April or May. Usually she has

not more than from five to six cubs; but some few years ago a lair was found near to Gellivaara in Lapland, containing the extraordinary number of eleven cubs. The Rev. Johan Björkman, the rector of the parish, who relates the circumstance, supposes, however, that two bitch wolves had whelped in the same bed, and that the weaker of the mothers had afterwards been expelled and driven away by the stronger.

Wolf cubs, when very young, are nearly black, and so closely resemble those of the fox, that people are often deceived in them. I myself was nearly so on one occasion. There is this difference, however, that the wolf cub has not the white tip to his tail that the fox cub has; and when three or four weeks old, the head and neck begin to be a little greyish. The hair is very soft and fine, like the body hair of old foxes.

The wolf has proverbially a most ravenous appetite. Pontoppidan in his quaint way tells us:* "He can suffer hunger and hardships for a long time, which is common for beasts of prey, according to the Creator's wise institution; for their provision is uncertain, and comes accidentally, and at irregular intervals. When his hunger becomes too great, he'll eat clay if it is to be had; and this, as it is not to be digested, remains in his belly till he gets flesh, and that works it off violently; and then he is heard to howl most dismally for pain; and if he is watched upon this, and his excrements are found, they are mixed with a woolly matter, which many have assured me. Near Vandelven, on Sundmœr, a farmer

* The above and other quotations from Pontoppidan are not, it should be remarked, from the original work, to which unfortunately the author has not had access, but from a translation published in London in 1755.

saw a wolf that appeared very sick, and so faint, that he could hardly move along. It gave the farmer double courage, who mended his pace, got up to him, and killed him. He had the curiosity to open him and see what was the matter, and he found his stomach filled with moss from the cliffs, and birch tops."

When the wolf is hungry, everything is game that comes to his net. In the Gulf of Bothnia he often preys on seals. When that sea is frozen over, or partially so, as is generally the case soon after the turn of the year, he roams its icy surface in search of the young of the grey seal, which at that season breed amongst the hummocks in great numbers; and finding this an easy way of procuring sustenance, he remains on the ice until it breaks up in the spring. It not unfrequently happens, however, that during storms, large fields of ice, on which numbers of wolves are congregated, break loose from the shore or the land-ice, in which case, as soon as the beasts perceive their danger, but see no possibility of escape, they rush to and fro, keeping up the while a most woeful howling — heard frequently at a great distance—until they are swallowed up by the waves.

The Scandinavian wolf, though subject to several diseases, is happily, I believe, exempt from rabies. This is well; for were they liable to that horrid infliction, the consequences would be dreadful from their numbers, and their being so generally distributed throughout the peninsula. In warmer climes, as known, the destruction caused by this animal when the fatal malady is at work within him, is awful to contemplate.

"A mad wolf in the vicinity of Hue-au-Gal in France,"

such is the substance of a paragraph that recently met my eye in a Swedish journal, "has during a single day (April 25, 1851) bitten no less than forty-six persons and eighty-two head of cattle. The accounts are very afflicting. The consequences have begun to show themselves. One person is dying after another in the most frightful agonies. All the cattle were purposely destroyed. The treatment recommended in similar cases—namely, that the wound should be kept in a state of suppuration for fifty days—has not been adopted, so that probably none of those bitten can be saved."

Another account, dated August 18, 1852, ran as follows:

"The small town of Adalia, in the Turkish territories, has just been the scene of a sad catastrophe. On the 7th of July a mad wolf rushed into the place, attacked and severely bit several individuals in the street; but becoming at length alarmed at the cries of the people, he made for the gardens at the outskirts of the town. In consequence of this being the time of the silkworm harvest, several hundred individuals slept in one and the same garden, and one hundred and twenty-eight of them were severely wounded! Owing to the Governor having recently taken from the inhabitants every kind of weapon, the unhappy people found themselves without any means of defence. The wolf was at length driven thence also; but the same night he attacked a flock of sheep, and killed eighty-five of them. It was not until the following day that the people, to whom the Governor had returned their arms, succeeded in destroying the beast. The report of a medical man resident in the town, in regard to the wounded, is frightful. The most shocking part of the affair is, that several of those bitten have

already died raving mad, and the population of the place are in a state of the most terrible consternation."

It is the generally received opinion that wild beasts flee from fire; but such seems not always to be the case with the wolf.

"When I was out one night for the purpose of spearing pike by Bloss, or torch-light, near to Ekshult, in Westgothland, and in a *Kärr-Äng*, or wet meadow, then covered with water from the adjoining lake," says the Jägare Roxberg, "my attention was attracted by a splashing in the water, as of a dog running through it. Supposing it to be one of my own dogs that had got loose and followed me, I steered my *Ek-stock** up a dyke that intersected the field, where the water was deeper, that I might take the animal into the punt. When I had approached the *Skogs-bryn*, or edge of the wood, I perceived a much larger object, which at first I almost fancied might be a human being; but by the light of the fire I soon made it out to be a large wolf, standing quite still in the water, and gazing attentively at the Bloss. He was not at more than twenty feet distance. Thus we stood looking at each other for several minutes. But when I attempted to approach somewhat nearer, for the purpose of driving my Ljuster into his body, he moved off; not, however, in an opposite direction, but in a line with the Ek-stock, and with his head always turned towards the light. Subsequently I heard him wading in the water, along the edge of the meadow, where he disturbed several wild ducks, as evidenced by their cries when they took wing.

The wolf has the reputation of being innately a great

* The trunk of a tree hollowed out in the manner of a canoe.

poltroon. "Fierce as this beast is," says Pontoppidan, "he is daunted when he meets with the least resistance, and only bold and daring against those that he puts to flight: to those that are afraid of him he is merciless; but as long as even the deer is upon the defence he does not attack him. And it has been often seen, that not only a cow, but even a goat, when it has turned against him, and butted at him, or pushed at him with his horns, has maintained its ground against him, and put him to flight. In this case the wolf is not unlike the evil spirit, whom the Word of God represents to us to be a coward, and only to appear bold against the unbeliever's fear; as we read in Scripture: 'Stand up against him, and he shall fly from you; resist the devil, and he shall flee from you.'"

But whether the wolf be innately a poltroon or not, certain it is that when hungry he is a daring and formidable beast.

"During severe weather, especially in the month of January," says Olaus Magnus, "wolves collect in large droves, and are in the highest degree destructive; and when people at such times journey in sledges, they come rushing down upon them in numbers from all quarters; so that clergymen, when visiting their distant congregations, and indeed travellers in general, are obliged to be provided with guns, and bows and arrows, to protect themselves and horses. What with cold and hunger," this author goes on to say, "wolves are frequently so frantically savage, that they enter out-buildings, and either devour the cattle therein, or drag them away mangled to the forest."

Pontoppidan tells us something to the same effect. "Hunger, sharp as a sword," says the worthy prelate,

"makes the wolf, in the winter season, much bolder than usual, so that he will often, and particularly upon the ice, take away a horse from a sledge; for this reason travellers, at that time of the year, are generally provided with fire-arms. The late Bishop Munck in christianity would not believe there was any occasion for these; and persuaded a clergyman of his diocese, whose name was M. Kolbiorn (father of the eminent Kolbiorns, so distinguished in the late war by their valour and courage at Frederickshald), that it did not become his function to carry a gun with him when he travelled to church, or on ecclesiastical affairs. But the bishop got the better of this prejudice, on being taken over the ice by this very minister, on one of his visitation journeys. They were in expectation of seeing a wolf, which accordingly appeared. The bishop, at sight of him, began to be frightened, and asked M. Kolbiorn if he had not his gun; and, from this day, he was convinced it was both necessary and becoming."

Daring as the wolf was in olden times, he has lost nothing in audacity at the present day.

"In places where cattle have been pastured in security for sixteen years," so we lately read in a Norwegian journal, "droves of wolves, sometimes as many as twelve in number, now prowl about in search of prey. They approach near to inhabited houses, although there may be people about the premises. And that they are not afraid, is evidenced by their remaining perfectly still, even when fired upon. Two wolves recently seized a sheep, and were about to devour it, when two women ran to the rescue, and attempted by shouts and casting stones, to drive them away. But the beasts took not the slightest notice of their assaults,

until one of the women, taking up a large stone, and going close up to them, threw it with all her force against the leg of one of the animals, thereby laming it severely, which had the effect of causing both to relinquish their half-devoured prey, and to retreat.

"In another instance, at Sandsver, a peasant's wife and a wolf had a regular fight for a goat. The beast had seized the poor animal, when the woman, in the hope of getting it out of his clutches, and whilst pulling at the goat's leg with one hand, with a cudgel which she held in the other thumped away at the depredator with all her might! But it was some time before she could compel the wolf to quit his hold; when growling, and as if half inclined to attack her in turn, he retired to the forest.

"A peasant at Rajeheia," the account farther states, "had also a battle with a wolf, under somewhat similar circumstances; but this beast, which had likewise made free with a goat, was more obstinate; for though the man belaboured him right well with a stout stick, he would not quit his prey. Seeing no other remedy, the peasant therefore let go his hold of the goat, and grasping the wolf by the tail, he pulled and tugged at him with all his might, which rough treatment at length had the desired effect. But the matter was not greatly mended; for although the beast relinquished the goat, he assaulted the man, whom he bit severely in the arm. And having thus revenged himself, he walked quietly away."

"The wolves this winter are remarkably daring in the country about Kragerö," so the same journal tells us, under date of March, 1852. "They show themselves in large droves near the high road, and even approach the very outskirts of the

town itself, in the vicinity of which they recently displayed extraordinary audacity. It happened thus:—Two ladies, who resided there, were taking an airing in a sledge; but they had only proceeded a short distance from the town, when six wolves stationed themselves before the horse, and would not get out of the way, although the coachman used his best endeavours to force the animal forward. Very fortunately there was a dog with the party, which more especially attracted the attention of the beasts, and which they quickly seized and tore to pieces; and thus the ladies got off with a terrible fright only."

The wolf, as known, is a great enemy to dogs; and in some parts of Scandinavia it is next to impossible to keep those animals. Even in the vicinity of Ronnum, dogs were often picked up by them.

On one occasion, when proceeding, in the winter time, on a visit to my immediate neighbour, M. Bagge, at Ny-Gård, and on a slight eminence, within a couple of hundred paces of the house, I perceived a black, shaggy mass lying on the snow, with much blood about it. Leaving the sledge, to see what it might be, I found, to my regret, that it was the head of my friend's favourite yard-dog, which, as it appeared, the wolves had destroyed—whilst chained to his kennel, I believe—during the preceding night, but of which they had not left another morsel.

As a matter of curiosity, I cast the severed head, then hard frozen, into my vehicle, and carried it home; where, to my surprise, and in direct opposition to what M. Nilsson and others tell us, as to dogs never eating their fellows, my dogs feasted upon it as if the greatest of delicacies.

Albeit my friends and neighbours were occasionally sufferers, my own dogs were never carried off by the wolves, though, in one instance, they were in considerable peril. This was at an after-period, when residing at Gäddabäck distant three to four miles from Ronnum. It occurred in this manner:—About midnight, I was aroused from my slumbers by the furious barking of the dogs. Imagining there were thieves on the premises, I at once jumped out of bed, and, without waiting to put on one particle of clothing, stealthily left the house, in the hopes of coming unawares on the depredators. I had a single-barrelled pistol ready cocked in my hand; but, when I turned the corner of the out-building where the dogs were chained, I found myself confronted, at some ten paces' distance, with a large wolf. Though pretty dark at the time, and amongst the trees, I could distinctly make out his figure; and, without the loss of a moment, I levelled my weapon, and pulled the trigger; but, unfortunately, the cap missed fire. The beast, which had previously been stationary, becoming now alarmed, wheeled about and moved off; and though, whilst in the act of retreating, I sent a ball after him—for at this second attempt the cap exploded—it did not apparently take effect: but this was less surprising, as from his being in motion, and the foliage, my aim was very uncertain.

The wolf is amongst the most voracious of beasts. The slaughter he commits in the fold is at times terrible; and he frequently kills ten times more than he can devour. Hence it would appear, he is impelled rather by a mere love of destroying, than by hunger. It is possible, nevertheless, that hunger is really the cause that makes him commit

needless destruction; for he may reason like the famishing man, who finds himself seated before a plenteous board, and who is apt to fancy the whole contents of a larder will not be enough to satisfy his appetite, which, however, soon becomes appeased.

We read, for instance, that one winter's night, four wolves paid a visit to a *Svin-gård*, or piggery, in one of the rural districts of Sweden. Only one of the beasts had the temerity to leap over the high palisades surrounding the enclosure. But he played his part well, for in a very short time he slaughtered no less than eleven large hogs, devouring, however, only a very small portion of one of them. As was subsequently seen by the tracks in the snow, the other three wolves were merely spectators of the butchery. But the surviving pigs were soon revenged for the death of their fellows; for the proprietor, hearing of what was going on, hastened to the spot, and quickly destroyed the invader.

Wolves were occasionally destructive in the neighbourhood of Ronnum. On one occasion, within two or three miles of the house, these beasts slaughtered twenty or more sheep, the property of a peasant. These, for their better preservation, were confined for the night in a sort of movable shed, closed in front, and placed in the field in which they pastured. Unfortunately, however, there was no floor, and the wolves burrowing under it, obtained ready access to the poor creatures. The owner of the sheep was a considerable sufferer; but his loss was somewhat diminished, owing to myself and others purchasing a portion of the mutton, which, from being mangled, was in a very unsaleable state.

However savage wolves may be in their native wilds, yet

if reared up from a tender age, and kindly treated, they will become as docile as dogs.

"My husband," says Mrs. Carin Bedoire, "purchased at Gysinge three wolf cubs, which had only just obtained their sight. One of them was a female. I petitioned for leave to keep these little creatures a time. They were together for about a month, during which period they had their abode in an arbour in the garden. As soon as they heard me in the court-yard calling 'Små valparna' (little puppies)—for so I was accustomed to designate them—they would run up to me with such signs of affection and pleasure as was quite surprising; and when I had caressed them, and given them food, they would return to their asylum. After the lapse of a month, one of them, a male, was presented to M. af Uhr, and another, a female, to M. Thore Petrée. When the one we retained was left by himself, he took refuge with the work-people, though for the most part he followed me and my husband. It was remarkable, that this wolf became so faithful and attached, that when we took a walk about the estate, and he was with us, he would crouch beside us when we rested, and would not allow any one to approach nearer than about twenty paces; for if they came closer he would growl and show his teeth. When I scolded him, he would lick my hand, at the same time always keeping his eyes fastened on the intruder. He went about the house and in the kitchen in the same manner as a dog; and was much attached to the children, whom he would lick and play with. This continued until he was five months old, by which time he was grown large and strong, when my husband, who feared lest

during his gambols with the children he might injure them with his claws, which were very sharp; or that if by accident he found blood upon the children, he might feel inclined to do them injury, determined on having him tied up. But he nevertheless often went loose with me when I took a walk.

"He had his kennel in the lower yard near to the gate; and in the winter time, when the peasants came with charcoal, he would leap on to the stone fence, where he would wag his tail and whine until they came up to him and patted him. At such times he was always desirous of searching their pockets that he might ascertain if they had anything good to eat about them. The men became so accustomed to this, that they used to amuse themselves by putting a piece of bread in their coat-pockets to let him find it out, which he perfectly well understood, and he eat all that they gave him. Besides this he eat three bowls of food daily. It was remarkable that our dogs used to eat with him out of the same bowl; but if any strange animal attempted to share the food with him he would go beside himself with rage. Whenever he saw me in the yard he kept up a dreadful noise, and when I went up to his kennel he would raise himself on his hind legs and place his forepaws on my shoulders, and in the exuberance of his delight would lick me; but when I left him he would howl with sorrow.

"One day a fox was shot. Bedoire having fastened a rope round the carcase gave it to the wolf, who received it with much gratification, and drew it along with him into his kennel. But when Bedoire pulled at the rope, with the intention of taking it from him again, the wolf held his prey with such tenacity that both were drawn out of the kennel

together; and even then he only let go his hold of the carcase with the loss of two of his front teeth. As, however, these were his temporary teeth, others came in their place in about three weeks afterwards. We had him for a year, but as he was rather expensive to keep, and howled greatly at night, Bedoire determined on shooting him.

"The gardener, and the poetaster Malmberg, were his *Banemän*, or executioners. And it was not without sorrow that I saw him led to the garden—his first asylum—where he met his doom.

"The wolf presented to M. af Uhr, singularly enough, shared his kennel with one of that gentleman's dogs. The latter lay along with him every night; and when meat was given him to eat, he never could find it in his heart to devour the whole of it, but carried a portion to the wolf, who always received it with friendly gesticulation. And it happened not unfrequently that the wolf rewarded his friend the dog in a similar manner.

"Of the female wolf I have nothing to relate; but I have heard it said she was very ill-tempered and ferocious."

Having at different times reared wolves myself, I can, in part at least, corroborate Mrs. Bedoire's very interesting account as to the docility of those beasts when in confinement. I say in part, for having pea-fowl, &c., about the premises, I never ventured to give my wolves that degree of liberty which the one that lady more particularly speaks of enjoyed, whilst under her protection. While being handled, however, they were perfectly harmless; and, so far as myself and people were concerned, never evinced vice of any kind.

At one time, indeed, I had serious thoughts of training a

fine female wolf, in my possession, as a pointer; but I was deterred, owing to the *penchant* she exhibited for the neighbours' pigs. She was chained in a little enclosure, just in front of my window, into which those animals, when the gate happened to be left open, occasionally found their way. The devices the wolf employed to get them in her power were very amusing. When she saw a pig in the vicinity of her kennel, she, evidently with the purpose of putting him off his guard, would throw herself on her side or back, wag her tail most lovingly, and look innocence personified. And this amiable demeanour would continue, until the grunter was beguiled within the length of her tether, when, in the twinkling of an eye, "Richard was himself again."

Whilst young, her charges were invariably directed at the rear of the animal; and if she got hold of the tail, it was always taken off as clean as a cook would slice a carrot. Several pigs were under my own eye thus mutilated. When full-grown, however, she was not altogether satisfied with this fraction of a pig; and if one of a small size approached her too near, she would pitch bodily upon it, and seizing it crosswise in her mouth, as far as the length of her chain admitted, walk backwards and forwards with it in front of her kennel. The squeaks of the sufferer were, on these occasions awfully piercing, and I have had difficulty in relieving them from durance. And no wonder, if the jaws of the wolf, as I have heard asserted, possess such power as to enable his teeth to penetrate a thin plate of iron.

Though wolves are so numerous in Scandinavia, and commit such considerable ravages amongst cattle, they do

not often molest man. The most murderous of their attacks on record, were during the winter of 1820-21, when they killed, within a confined line of country, near to the town of Gefle, on the Bothnian Gulf, some twenty human beings, the greater part of whom, however, were children, and wounded many others. And though in the course of this slaughter several wolves were occasionally seen in company, it is the general opinion that the same beast was always the attacking party, and the primary cause of the mischief. From the boldness this wolf displayed, and his utter fearlessness of man, it was believed he, in early life, had been domesticated, and had subsequently escaped from confinement.

The subjoined details of some of the sad occurrences in question, may not be without interest.

"On the 1st of January, 1821," says the Rev. C. E. Ångman, "a peasant on his return from the post-house of Byås, in the parish of By, and when about two miles from the church, was attacked by a wolf, who pulled him down from the sledge in which he rode, and dragged him along the ground for some little distance; but the man's coat, of which the beast had hold, giving way, at length the poor fellow was enabled to regain his legs, when running back to the sledge, he pursued his journey. For the space of nearly a mile, however, and until he reached the village of Leknäs, he was closely followed by the wolf.

"Not long afterwards, a boy eight years old, son to the discharged soldier, Jäger, was attacked by a wolf. Together with several others he was cutting *gran-och tall-ris* (the sprigs of the spruce-pine and Scotch fir) for the use of the cattle, in an enclosure near to the cottage. When the

boys saw the wolf approaching, they shrieked out and fled towards home. But they were soon overtaken by the beast, who, rushing into the midst of them, seized the above-named boy in his jaws, and dragged him over a *Gärdesgård** and several stone walls. The children that escaped related what had happened to his mother, who forthwith ran to the assistance of her son. She found the wolf still grasping the poor boy in his jaws; but on her nearer approach he let him go and retreated. The boy still lives, and bears visible marks about him of the wolf's fangs.

"Subsequently a wolf fell in with some peasants, who with their sledges were journeying in company between Morshyttan in the parish of By, and Forssby in that of Folkärna, and attacked the rearmost of the party. The peasant seized a stout stake and attempted to kill the beast, who with great quickness evaded the blow, and cunningly getting behind the poor fellow, renewed the attack. On hearing the cries of the man, however, his comrades, who were in advance, came to his aid, on which the wolf retreated.

* The Gärdesgård is thus constructed: Two *Störar*—that is, stakes of ten to fifteen feet in length, and of the thickness of a man's wrist, are, with the assistance of a crow-bar, inserted upright in the ground opposite to each other, and at about four to five inches apart. These double stakes are continued at intervals of from three to four feet, the whole length of the intended enclosure. The open space is then filled up with *Gärdsel*—long bars, or strips of wood, usually young pines split into two or more pieces, which are laid longitudinally one on the other between the several pairs of Störar, until they reach to about the height of four feet. And whilst the fence is being thus constructed, and to keep everything in its proper place, the Störar at about every foot are bound fast together with Hankar, which word, as said, implies bands of any kind; but in its common acceptation Hank means a sapling, or small branch of the spruce-pine, or other pliable tree, previously passed through the flames to render it still more flexible. The nature of the Gärdesgård will be better understood by reference to the drawing, p. 490.

"From hence the same wolf ran directly to a neighbouring village. It would seem, at least, to have been the identical animal; for only a very few minutes afterwards a boy was there seized by a wolf, which dragged him over two stone walls. He was fortunately rescued from his perilous situation, however, by some peasants who were assembled in the village for the purpose of celebrating a christening.

"A wolf was next heard of near to Horndahls-*Bruk*,* where he killed a little girl aged eleven years named Stina, daughter of Anders Olsson, within a few stones' throw of her home, which she had just left on an errand. Some peasants, who were crossing the large lake Rossen, which was hard by, saw the beast with the girl lying under him. They tore the corpse from his grasp by force, and laid it on one of their sledges for the purpose of depositing it at the nearest house, which happened to be the child's home. When the parents came out of doors and learnt the sad fate of their offspring, the wolf was there also, and remained awhile without evincing the least fear of the people who were collected. His gluttony and craving for human flesh seems to have been very great; for when on the way from the lake to the cottage, he licked up the blood that ran from the body of the child on to the snow. This tragical event is, for the most part, inscribed in the parish register. The girl was interred on the 4th of February.

"The same day, in the evening, a wolf made his appearance at a house near to the church, and carried away a boy of five years of age, who was standing on some steps outside

* *Bruk*, in its common acceptation, signifies iron-works, but is applicable also to other manufactories.

the door; but fortunately a number of people, who happened to be passing at the time, rescued the child.

"From hence the wolf proceeded to the village of Vestanbäck, about two miles from Vadsbro, and attacked two boys who were amusing themselves with a little hand-sledge. They ran towards home, but were overtaken at the house of the soldier Skaffare. The beast rushed past the one that stopped at the gate, and seized the other, who had gained the little enclosure, by the back. He was, nevertheless, rescued by his parents, who fortunately at the time were near at hand.

"It is also related that a pregnant woman was attacked by a wolf on the road between the villages of Hede and Norrby. She ran to a Gärdesgård, and climbed up it; but the beast pulled her down again, tore her clothes to pieces, and bit one of her ears. The people from the village, hearing her cries, came to her assistance. But the woman and the child that she then bore in her bosom are still alive.

"A wolf was afterwards heard of on the 18th of March of the same year, in the village of Vatbo, distant four to five miles from the church. Whilst several children were on their way from hence to the neighbouring village of Andersbo, a wolf rushed amongst the poor little things, and carried off a boy named Anders, aged six years and a half. The wolf and the corpse were discovered far from the spot. When the melancholy catastrophe happened, which is inscribed in the parish register, the child's mother was in church.

"It is said that two wolves, a larger and a smaller, have been seen in company; but here, in the parish of By, during all the above occurrences, not more than one large wolf was visible."

"On the 10th of February, 1821," writes M. Boström from Stjernsund, "the boy Erik Sundstedt, who was born on the 1st of July, 1806, was killed by a wolf near this place. Two other lads and himself were skating on the lake Grycken, and halted for a while on an island at about two hundred fathoms to the eastward of the Bruk. One of the boys, C. W. Sundmark, born 23rd of May, 1807, stood nearest to Sundstedt; the other, Johan Westerberg, born in 1805, at ten or twelve paces' distance. Whilst thus resting, a wolf suddenly rushed amongst them. He was of an uncommonly large size; in colour light grey, with some dark spots, and white under the belly; and according to the testimony of the survivors, his growl was as loud as the bellowing of an ox. He first made towards Sundmark, who by casting himself on one side, and brandishing a short stick in the face of the beast, escaped. The unfortunate boy Sundstedt, being without skates at the moment, was unable to get out of the way, and the wolf attacking him next, cast him on the ground, and threw himself upon his victim, bit him in the throat, and shook him dreadfully. The cries of agony uttered by Sundstedt were described by his comrades as most heart-rending. But believing they could render him no assistance, and affrighted beyond measure, they ran on their skates to the Bruk as fast as they were able.

"In the meanwhile the wolf dragged the poor boy over the island, which is called Björknäbba, then for a short distance along the ice, across the high-road, and up a considerable eminence, and finally to a wooded and stony piece of ground—the distance altogether being about one thousand feet.

"On hearing of the sad occurrence, several persons instantly hastened from the Bruk, and following the tracks, soon came up to the boy, who though still alive, expired shortly afterwards; but of the wolf nothing more was seen.

"The body of the poor fellow, with the exception of his legs, feet, and one of his arms, was divested of every particle of clothing, even to the shirt itself. It was besides terribly mutilated, although the number of wounds could not be calculated to a certainty. They were found on the head, nose, cheeks, throat, arms, and here and there over the body and thighs. On each side of the nose there were several holes as if from the beast's claws, and others on the neck from his teeth. On one side of the stomach some of the bowels were drawn out; but with the exception of a part of one of the ears, which was gone, there was not the least portion of the body eaten.

"For a long time after this terrible catastrophe, the boy Sundmark, owing to the severe shock his nervous system had received, remained in a very melancholy and depressed state.

"The same day, 10th of February, 1821, at one o'clock, Anna, a girl aged twelve years, daughter of Jan Jansson of Bastmora (distant eight to nine miles from Stjernsund), was carried off by a wolf.

"The mother had just left her daughter in the cow-house, but hearing a cry of distress, she ran back to see what was the matter, when she found the door of the building closed, and outside of it an overturned pail, in which, to her horror, was lying the bloody flesh of the right cheek of her child, as also the handkerchief that had served for her head-dress.

Looking around, she saw the poor creature in the jaws of an immense wolf, who was dragging her up the face of a rather precipitous acclivity at some fifty paces' distance. The beast had hold of the girl crosswise by the thigh; but as she was tall for her age, and heavy, and the ground slippery, and he in consequence unable to carry her, he would swing her half round, as it were, in advance; and when he had thus got his burthen a little before him, step forward a pace or two and repeat the manœuvre.

"As soon as the poor mother saw the dreadful situation of her child, she rushed distracted to the spot, whereupon the wolf dropped his victim. But as the beast only moved to a few paces' distance, where with distended jaws, and pendent tongue dripping blood, he stood eyeing her fixedly, the exhausted parent could not aid the sufferer until such time as she obtained assistance. Whilst hastening to the spot, she thought she once heard the child exclaim Jan, the name of her young brother. The mother's cries soon brought the servant-maid, who was armed with a stout stake, to her aid, on which the wolf moved somewhat farther off. The mother now fell on her knees, and clasped her daughter in her arms; their eyes met for the last time, for after uttering a single sigh, the girl breathed her last.

"Soon after the catastrophe, the man-servant, who had been absent from the house, returned and assisted in bearing home the corpse; of which mournful ceremony the wolf, who had remained stationary all the time, was a spectator. This beast was described as very large, and of a light brindled-grey colour. On the following day it was found that he had torn up the ice where he had been deprived of his

prey; but it could not be ascertained if this had been done at the time of the calamity, or during the succeeding night.

"Independently of the dreadful wound in the cheek, the poor deceased girl had several severe bruises on the head, and many wounds in the thigh. A leather jacket that she wore had probably saved her neck and breast."

"In the small village of Jemtbo, which contains only three families," says the Rev. P. S. Lönegren, Rector of the parish of Garpenberg, "the following catastrophe occurred on the 12th of January, 1821, between the hours of eleven and twelve in the forenoon. The people in one of the houses were making preparations for a funeral, and were moving about the premises in every direction, and being in want of a *Spjell*,* a little boy, aged six years and a half, was sent to fetch one from a neighbouring cottage, distant only some twenty paces. On the way, however, he was suddenly attacked by a wolf, which, seizing hold of his throat, dragged him, together with the Spjell, across the enclosure to a thicket, scarcely a gun-shot off. The blood about the spot made known what had happened, and the alarm being given, the people immediately pursued the tracks of the beast. But they came too late—though in time to see two wolves retreat—for the body of the lad was all but devoured, and little more than the bones and the Spjell remained.

"A similar melancholy occurrence happened in February of the same year, and at the same hour of the day, in

* A thin iron plate to close the chimney, thereby to retain warmth in the apartment; but at times it is used for baking purposes.

the village of Räfshytta, consisting of twelve families. A boy aged nine years and a half, was leading by the hand his little sister, who was only three years and a half old, with the intention of paying a visit to a neighbouring cottage, when all at once a wolf rushed from a by-path, and seized hold of the boy. The mother hearing his cries, and seeing from the window the danger her children were in, called to another son, a youth of sixteen, then hewing wood at the back of the house, who, axe in hand, instantly rushed to the spot. On his near approach, however, the beast let go his hold of the lad, and fastening his fangs in the little girl instead, bore her off to the forest. Unfortunately, there were no men at the time in the village to render assistance. The mother, who was far advanced in pregnancy, attempted nevertheless to fly to the rescue of her offspring; but she had not proceeded more than a few paces from the cottage-door, when she fell to the ground in a swoon. Pursuit was subsequently made and after a while the child was found, or rather its remains, the beast having already devoured nearly the whole of the body.

"In the month of March, 1821, a still more audacious onset was made by a wolf. Daniel Dalberg, a hired servant, in the village of Jelken—a youth tall and strong for his age—whilst watering the cattle at noon, within a short pistol-shot of the house, was attacked by a wolf, which seized him by the breast, and threw him at once to the ground. By means of his hands, however, the youth saved his throat; but he could not prevent the savage from fastening his fangs into his shoulder, and thus drawing him towards a neighbouring Gärdesgård. The beast made

several desperate attempts to get him over this obstruction; but owing to the youth's violent resistance, and the weight of the burthen, he was unable to accomplish his purpose. In the meanwhile the cries of the youth, and the bellowing of the cattle, brought people out of the house, who presently relieved him from his perilous situation. And they came in the very nick of time, for at the instant a second wolf was observed, at about one hundred paces' distance, rushing down from the forest to share the booty with his fellow. The youth was wounded in several places, and the deep scars his person still bears, testify to the injuries he received on the occasion.

"Fright and an excited imagination," M. Lönegren concludes by saying, "caused the peasantry to believe that the wolves, which, at the period in question, attacked and destroyed so many people, both in colour and formation were totally different from common wolves."

CHAPTER XXVIII.

METHODS OF CAPTURING WOLVES — SUPERSTITION — CHASE ON SKIDOR — HUNTING WITH DOGS — SEARCHING FOR THE LYA — LUDER-PLATS — A PIG THE DECOY — THE CORNET'S ADVENTURE — THE VARG-GROP — THE PARSON IN DIFFICULTY — THE VARG-GÅRD — THE GLUGG — STEEL TRAPS — THE BRANDAR — THE VARG-KROK — POISON — SELF-CAPTURE.

"THE wolf in some places," M. von Greiff tells us, "taxes the peasant higher than the Crown." The antipathy to the beast is still farther increased by the prevalent idea that he is some evil spirit incarnate! According to the Northern Mythology, indeed, the giantess Angerboda bore wolves to Loke, *den Onde*, or the Wicked God:

"Eastward, in the forest of iron,
Sat the Evil One,
And there begat
The young wolves."

"And from hence," we also read, "all the different races of wolves are descended."

The superstitious notions entertained in Scandinavia regarding the wolf, are multitudinous. In certain districts,

during a portion of the spring, the peasants do not venture to call him by his usual designation of Varg, as in that case he will carry away their cattle the following summer, but substitute in its stead that of Ulf, Gråhans, &c. To meet a wolf at certain hours, or under certain circumstances, is looked upon as a bad omen; and the appearance of those beasts in numbers, to forebode war or other great calamity. Old hags, moreover, reputed to deal in the black art, who dwell alone in the recesses of the forest, are believed to be in league with, and to harbour wolves; and, in consequence, they go by the hated name of *Varg-Mödrar* or wolf-mothers.

The wolf having thus a bad name in every way, it is little surprising that the hand of every man is raised against him.

WOLF CHASE ON SKIDOR.

A good many wolves are run down on Skidor, chiefly however in the northern districts of Scandinavia, where

the country is more open, and but little intersected by paths.

The Lapps, when thus pursuing the wolf, have frequently no other weapon than a stout staff of about six feet in length, armed at one end with a pike, which staff serves to expedite or retard their own progress, and also to deal destruction to their worst enemy. So the wolf, with every propriety may be called; for night and day, summer and winter, he hangs with the tenacity of the night-mare on the rear of the rein-deer, ever and anon picking up a straggler, and in one instance, we are told, as many as forty out of a single herd. Several individuals usually take part in these hunts; and as the wolf often holds out a day or two, the men are provided with a good supply of provisions. When the beast finds himself pursued, he, like the bear, takes to broken ground and the most tangled thickets, from whence at times there is difficulty in dislodging him. When hard pressed, and that he begins to tire, he makes for a beaten path if one is to be found, where, as the footing is hard, he for a time has it all his own way. Sooner or later, however, he is necessitated to quit the "vantage-ground," and betake himself once more to the forest or the fjäll, as the case may be. Thus the chase may continue for a day or two, until the beast is fairly worn out with hunger and fatigue, when his pursuers are enabled to close with him—generally on the long slope of a hill—and to put an end to his miseries and his life.

Though many wolves are thus annually killed in Lapland, it is not often that a regular slaughter takes place amongst those beasts. But such at times do occur. "Several merchants

from this place," writes M. Ekenstam from the town of Luleå on the Bothnian Gulf, under date of the 6th of May, 1833, "who a fortnight ago returned from the fair of Gellivaara, speak of the extraordinary destruction the Lapps have made amongst their inveterate enemies, the wolves, in the beginning of last April, not only in that parish, but in the adjoining ones of Qvickjock and Jockmock. In Gellivaara alone no less than seventy of those beasts were killed in the course of a week, and fifty more in the above parishes in the same space of time. That great numbers of wolves have actually fallen victims to the revenge of the Lapps, we may safely infer from the price of the skins, which were sold as low as five shillings each. The Lapps do not recollect for the past twenty years such a concurrence of favourable circumstances for their wolf slaughter. There were such alternations in the weather—sometimes frost, and at other times thaw—that the surface of the snow, which was deep in the woods, would support their Skidor, but not the weight of the wolves."

From actual experience, I myself can say nothing of the Chasse in question; for though during my wanderings in the northern forests, I have frequently fallen in with the tracks of wolves, the localities were always such, that any attempt to overtake the beasts would have been worse than useless.

Little in the shape of wolf-hunting—such at least as accords with our notions of hunting—is practised in Sweden; and that little is, from necessity, always followed on foot. From the difficult nature of the ground, and the peculiar style of fence, it would be quite an impossibility to pursue that beast on horseback. Even the wolf-hunts

that do take place are chiefly for the capture of cubs, the dogs of the country being little capable of facing the old ones. Were the dogs ever so courageous and strong, indeed, it would hardly be worth a man's while to make wolf hunting a regular pastime, as from the immensity of the forests, and the wandering habits of the beast, the hunter would never know where to find him.

There are individuals, however, who follow up this sport. "The Hof-Jägmästare, J. A. Ström," we are told, for instance, "makes use of strong dogs of a powerful breed for wolf hunting. In the early part of the summer, when the cubs are small, he begins with six dogs; but in the autumn, when the young follow the mother, twelve to twenty-four dogs are slipped from their couplings at once."

When speaking of destroying wolf cubs at the *Lya*, or lair—a plan, by the bye, which, if more generally adopted, would tend more than anything else to diminish the number of those beasts—M. Ström tells us: "Wolves do not pair at Christmas time, as many believe, but in the end of February or beginning of March; and the cubs are born after the lapse of nine weeks. They are blind for eleven days, and do not leave the Lya before they are a month old, during which while the mother never goes far from them, but seeks her prey in the vicinity—that is to say, within a distance of from three to four miles of home. When at this time, therefore, she repeatedly attacks cattle, her lair, which one may be assured is not far off, should be sought for. This can be done by twenty to thirty persons, who, forming line, beat the country before them in the same manner as with a Dref-Skall. Whilst the

young are small, the favourite resorts of wolves are the thickest brakes and the clefts of the most inaccessible rocks; but when the rye is of sufficient height to shelter them properly, they often take refuge in the rye-fields. The bones of slaughtered animals betray their dwelling-place; and if large and courageous dogs, who are accustomed to give *Ståud-Skall*—that is, to continue challenging at one and the same spot—be used, they will soon make known where the Lya and the cubs are to be found. There is little reason to fear losing the dogs; for at this time of the year the wolves are thin-haired and timorous, and will not willingly meet the attack of several dogs conjointly. The she-wolf does not, like the fox, litter in deep holes in the ground, where it is difficult to get at the cubs; but under boulders, under the stumps of uprooted trunks, in close thickets, or beneath spruce-pine trees, the branches of which hang to the very ground; and for this reason, when the Lya is found, one can readily take and destroy the cubs.

"One of the number, however, should be retained alive, that by means of its cries the mother may be killed also. The object is best effected by erecting a screen of boughs, near to the lair, where two of the hunting party (the rest retiring to a distance) secrete themselves, and shoot her on her return home. This is hastened by the piteous lament of her offspring, who at some four feet from the ground, is suspended by the hind leg to a neighbouring tree. But the men, at such times, should face in opposite directions, so that one or the other will be sure to see her when she first makes her appearance, as she then comes much nearer to the ambush than afterwards."

The Chamberlain L. G. Kolthoff, in allusion to the same subject, tells us, that in his part of the country the peasants have an easy method of discovering a wolf's lair. "The cubs," says that gentleman, "almost always let their whereabouts be known in the night time, when they are alone, and the mother absent on a foray. If, therefore, one goes into the forest when the young are pretty well grown, and especially between eleven and twelve o'clock, and listens attentively for their screeching cry, their whereabouts may be readily ascertained."

A good many wolves are also killed in Skalls; not, however, during the summer, owing chiefly to the locale of those beasts being then uncertain, but in the regularly organized winter Skalls, mentioned in my former work, where Skall-platser are previously prepared; for when the beasts are congregated at the *Luder-plats*—or the spot where carrion is exposed for the purpose of attracting wild beasts, and surrounded not alone with Jagt-tyg, but six to seven hundred men—it is hardly possible for them to escape.

Such Skall-platser, however, owing to the expense and trouble attendant on keeping them up, &c., are not of frequent occurrence in Sweden; but they are, nevertheless, to be met with in the provinces most infested by wolves. Considerable execution is done at them. In those near to Stockholm, it is on record, for instance, that "from 1821 to 1828, a period of eight years, in the course of which thirty-five great Skalls took place, one hundred and fifty-four full-grown wolves were killed! and this independently of some fifty cubs, which were found in the females, on opening their bodies after death." The Skalls in question

were under the command of M. Arrhenius, who very deservedly obtained much credit for the superior manner in which they were conducted.

SHOOTING WOLVES WITH A PIG.

As mentioned in my former work, a not uncommon plan of shooting wolves in the winter time in Scandinavia, is to traverse the country taking a pig in one's sledge; for if there be any of those beasts in the vicinity, the squeaks of the grunter, which a pinch of the ear, or the prick of a pin, will elicit in abundance, are pretty sure to bring them within shot. On these occasions it is also desirable to tie a dog to the back of the vehicle; for even should the wolf not be near enough to hear the cries of the pig, he may, whilst on the prowl, come on the track of the dog, in which case he is nearly sure to follow it up, as a hound would a *Släp*, or drag. Though the device in question succeeds occasionally in the day time, it answers much better in the night, especially when there is moonlight.

But even if the wolf be attracted by the squeaks of the pig, it is not always he will venture to approach within gun-shot of the sledge. Should this be the case, the better plan, particularly if there be two persons in company, is to jump unobserved from off the vehicle whilst it is passing a tree or a bush, and to lie in ambush for the beast, the sledge waiting the while at some distance ahead.

Some will have it there is danger in these nocturnal expeditions; but knowing what we do of the cowardly nature of the wolf, I apprehend that if a man be true to himself, the risk is not great. I do not speak from experience, however; for on the several different occasions of my trying the plan, it was never my luck to fall in with even a single wolf. A year or two after leaving Lapp-Cottage, in Wermeland, where the reader may remember I was formerly located, a friend of mine, Cornet Carl Geijer, was more fortunate. But he shall tell his own story—a somewhat singular one, by the bye—in his own words.

"Some years ago, whilst I was residing at Uddeholm," says the gallant officer, "the servant-girl came into my room about eight o'clock one evening, and informed me that she had just heard cries of distress on the lake Råda, situate within twenty paces of the mansion; which cries, on going out of doors for the purpose of ascertaining the truth of her report, I myself could also plainly distinguish. A short time afterwards a peasant made his appearance, and said that he had been attacked on the ice by a drove of five wolves, who had attempted to take the horse from him; and that it was only by the aid of a stout cudgel that he and the steed had escaped their jaws.

"I ordered a horse to be harnessed forthwith to a *Kolryss* (an immense basket-like sledge, used for the purpose of conveying charcoal to the furnaces), as also a pig to be put in a sack; and with the Estate Inspector as a companion, and provided with three guns, loaded with *Varg-hagel*, or wolf-shot—small slugs, in short—I betook myself to the lake.

"At first the pig would not squeal at all; but as soon as we had got his head out of the sack, and pulled his ears, he opened his pipes most lustily. We had not gone far before three wolves made their appearance; but they would not approach nearer to us than some eighty paces, at about which distance — the sledge proceeding at a slow pace the while—they followed us for a considerable time. Finding, however, that so long as we kept moving, the beasts would not come closer to us, we halted, on which they presently advanced to within forty or fifty paces, and quietly seated themselves on their haunches. The Inspector and myself now agreed slowly to count one, two, three, and on pronouncing the last number to fire, each at his own particular wolf. We did so, our guns going off so simultaneously that the report seemed like one and the same. Both of the wolves at which we had aimed fell on the instant, but the third moved quickly off.

"The Inspector and I now ran towards the spot where the beasts lay, but in our joy forgot to take the third gun, which was still charged, along with us. We had not proceeded more than twenty paces from the Kolryss, however, when one of the prostrate wolves—although he had not hitherto moved in the least—suddenly got on his legs and ran off. Seeing this, I returned forthwith to the sledge

for the loaded piece. The Inspector, meanwhile, went up to the remaining wolf, which was still quite passive, and seized it by the leg, with the intention of drawing it towards our vehicle. But as the beast showed signs of vitality, he gave him a blow on the head with the butt of his gun. This, however, had the contrary effect to that intended; for instead of dispatching, it brought him to life, and on to his legs again; and a second blow mended not the matter, for he now not only broke away from his captor, but following the example of his comrade, ran away. At this moment I had just got hold of the loaded gun, and was in the act of giving the wolf the *coup de grâce*, when, as ill-luck would have it, the Inspector stood in the very line of fire, and in consequence I dared not pull the trigger.

"We afterwards got into the sledge, and endeavoured to overtake the hard-lived beast that my comrade had been belabouring; but for the reason that our horse—whom we had selected because he was old and steady, and therefore not likely to be afraid of fire—could not be got out of a walk, the attempt proved fruitless. We persevered, nevertheless, so long as possible; and at times, by the light of the moon, saw the beast as he *lunkade*, or trotted slowly before us. But it was of no avail, and we were at length obliged—though very reluctantly, and little satisfied with our evening's work—to give up farther pursuit for the time.

"At an early hour on the following morning, we renewed the chase. The wounded wolves had taken different directions. The one the Inspector shot at, we found near to the borders of the lake, and about three to four miles from

where he had fallen the preceding evening; or rather, we discovered his head, tail, and feet, his companions having wholly devoured the rest of him.

The other beast, at which I myself fired, we also found near to the lake, under a willow-bush where he had passed the night; but he ran off at our approach. There was not only a large quantity of blood in his bed, but also something, that, as it appeared to us, had exuded from his intestines. I tracked him the whole day, and viewed him several times when crossing openings in the forest; but on these occasions he was always out of shot range. Everywhere more or less blood was to be seen in his Spår, especially in those places where he had made temporary halts. But all my efforts to come up with him that day were unavailing; and they were equally so on the following, which was the less surprising, as the snow was so deep as to take me at least up to the knees, and my progress was consequently very slow.

"On the third day I took two men and two large dogs with me, and had no difficulty in again rousing the wolf; for, as on previous occasions, he had passed the night very near to where he was left on the preceding evening: and here also there was much blood. But the dogs were of no avail; for as soon as they scented the beast, they were frightened, and came to heel, and would not leave us for the remainder of the day. We ourselves, nevertheless, persevered the whole of the forenoon; but finding at length that the wolf, instead of becoming weaker and weaker, as after so great a loss of blood one would have expected, began now to leap with facility over objects that he had previously the greatest difficulty in surmounting, we con-

sidered all farther pursuit worse than useless, and returned home."

Numbers of wolves are captured in Sweden in the *Varg-grop*, or wolf-pit; which, as described in "Northern Sports," is usually ten to twelve feet in depth, by the same measurement in diameter. Many are square, some octagonal, and others circular. As well for the purpose of preventing the earth from falling into the pit, as wild beasts, that may be incarcerated, from working themselves out, the sides are usually built up with wood or stone. The proper construction of the pit-fall would seem to be still a mooted question in Scandinavia; but all agree in this, that it should be sunk in a dry and open situation, and in preference free from trees, bushes, fences, &c.; as also at not more than two hundred to three hundred paces from the *Ladu-gård*, or cattle-house; for—singularly enough—the more distant the Varg-grop is from that building, the more the suspicions of wild beasts are excited.

Great execution is at times done in these pit-falls. In one instance, Dr. Willman informed me, no less than eight wolves were captured at one and the same time. Others had also been engulphed, as was evident by the marks in the snow, but had subsequently escaped, and, as it was believed, by making the backs of their fellows serve as scaling-ladders. On the occasion in question, a fox was likewise made captive, and though surrounded by his most deadly enemies, was still alive and unhurt.

Bipeds as well as quadrupeds sometimes fall into the Varg-grop, from which, owing to the perpendicularity of its sides, and its depth, escape by their own exertions, has been found impracticable. A somewhat amusing adven-

ture of the kind is related of a certain parson who flourished nearly a century ago.

"The reverend gentleman," so goes the story, "was a great sportsman, and like many others of the cloth, had a Varg-grop for the capture of wolves and foxes. One Sunday morning, after preparing his sermon, and putting on his *Kragar*, or bands, he took it into his head to pay a visit to the Varg-grop. On reaching the spot, he observed an aperture in the straw covering the pit-fall; and although he had then no time to send for a rope and a ladder to draw up the prisoner, he could not resist the temptation of seeing what beast it was of which he had made prize. For this purpose he peered down the pit; but having advanced too near to the brink, he over-balanced himself and fell head over heels to the bottom!*

"When he had somewhat recovered from the shock and fright this break-neck tumble had given him, he looked cautiously about his gloomy prison, and discovered in a corner a fox that a few hours before had made the descent in the same unexpected manner as himself. What was now to be done? The sermon was, it is true, in his pocket; everything was in order, and hearers alone were wanting; for the only one present seemed to be fully occupied with thoughts as to how he could best obtain his freedom. The same cogitation began now to trouble the poor parson, when

* To guard against similar accidents, which are not of unfrequent occurrence, the law very properly ordains, that prior to poison, pit-falls, steel-traps, or other dangerous devices for the destruction of wild beasts, being left exposed in the forest or elsewhere, due notice should be given from the pulpit. The party transgressing is not only subjected to a pecuniary fine, but is held answerable for all damages that the neglect of such public notification may have occasioned.

his English *byxsäcks-ur* * was pointing near to ten o'clock, the hour that the service should commence.

"Let us now leave the worthy man in safety, though in bad company, and see how things were going on at the Parsonage. Here there was more hurry and flurry, and more confusion of tongues amongst the women, than if the Dean or the Bishop had been expected. One ran here, and another there. If any of the newly-arrived congregation were met with, the same question was put to each: 'Have you seen the Pastor?' But all gave the same answer: 'No!' An old and faithful serving-man, however, who, to give his ears a little ease from the eternal jabbering going on amongst the women, had retired apart, began to reason within himself as to where his master could be; and it was not long before it entered his mind that by possibility he might have fallen into the Varg-grop.

"Without communicating his suspicions to any one therefore, he hastened towards the spot, and on his near approach he heard the parson singing with great fervour the 99th (Sw.) Psalm. Overjoyed at the discovery, he advanced to the edge of the abyss, and reached out his hand to the reverend divine for the purpose of helping him up. But the master was heavier by several stone than the man; and in his anxiety to escape from imprisonment, he pulled at the proffered hand with so much force as to draw the poor fellow down into the pit. Here now stood the trio, though certainly with alto-

* Literally, breeches' fob-watch. These machines, from their great size—resembling turnips, in short—are much valued by the peasantry, who on fitting and unfitting occasions exhibit them, together with the gaudy and bulky appendages. For the most part they were made by Ward of London, whence their usual designation of *Vardare*.

gether different reflections on their predicament; and here they had to remain until the afternoon, when aid at length arrived.

"And what of the assembled congregation? inquires the reader. Why, they had in all patience—the men with long tobacco-pipes, and the women with still longer histories of what had occurred in the parish—whiled away time on the churchyard, until hunger told them it was their dinner-hour!

"The report of this misadventure soon circulated; and as rumour generally makes a story worse than it really is, people at length said that three foxes of different colours—three cunning old rogues, in short—had been caught in the parson's Varg-grop! Happily there was no one ill-natured enough to tell the tale to the Bishop; but it is related that, from this time forward the reverend gentleman was careful to attend to his congregation in the first instance, and to his wolf-trap afterwards."

The wolf is also frequently captured in Sweden by means of the *Varg-gård*, or wolf-enclosure. This device is ingenious enough in its way—the principle being to erect such a fence that the beast may readily find his way into the enclosure; but from which, owing to the height of the fence, and its inward inclination, it is next to impossible for him to find his way out again.

Varg-gårdar differ somewhat, however, in their nature. In some, a considerable gap is left in the fence, so that wolves may have free access to the Luder-plats; which gap, on its being known that the beasts have entered, is hurriedly closed with Jagt-tyg. In others again, the fence completely encompasses the enclosure; when therefore the wolf has surmounted it, one has only to knock him on the head.

The plan recommended by the late M. von Greiff—embracing a pit-fall as the more ready means of destroying wolves when imprisoned, instead of hunting them down with men—is perhaps preferable to all others. Its nature, with the assistance of the annexed drawing, will be readily understood.

Fig. 1, it should be premised, shows the ground-plan of the Varg-gård as a whole; Fig. 2, the same in profile, the inclination of the fence, &c.; Fig. 3, the angle of the Varg-gård at the *Trumma*, or covered way, as also the pit-fall seen in front; Fig. 4, the Trumma and pit-fall, seen in profile; and Fig. 5, the fixed, as well as the artificial covering of the pit-fall.

The Varg-gård—so M. von Greiff tells us—may be constructed in any place where there is wood, and the ground not too stony; but in preference where the wolves have their *Stråk*—that is, the line of country they are in the habit of traversing when passing from one place or district to another. The locality selected should be near sand ridges, small morasses, &c., and surrounded by eminences where a pit-fall can be sunk that is not subject to inundation. An open, exposed country, or one to which the wind has free access, will not answer the purpose; for in the event of an unusually snowy winter, the snow-drifts would be so high near to the fence, as greatly to facilitate the escape of the wolf.

The circumference of the Varg-gård should be about twelve hundred feet, but a few feet more or less are not of consequence. In preference, its shape should be oval (Fig. 1), with the exception of the corner where the fences meet and form a right angle, where the pit-fall *a a a a* is situated.

The forest thereabouts should be left undisturbed as much

FIG. 3.

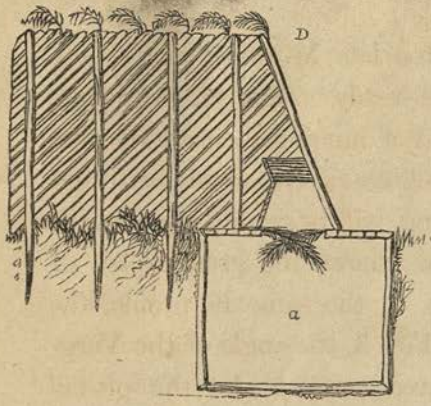


FIG. 1.

FIG. 4.

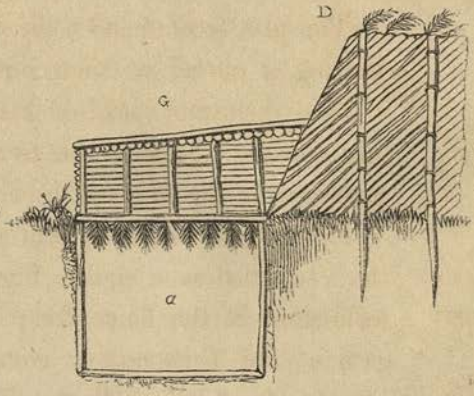
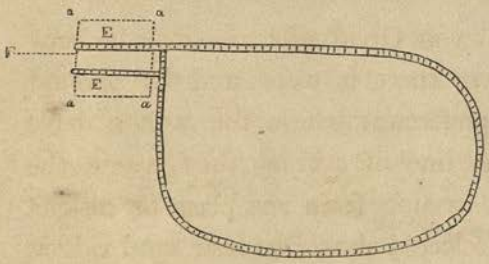


FIG. 5.



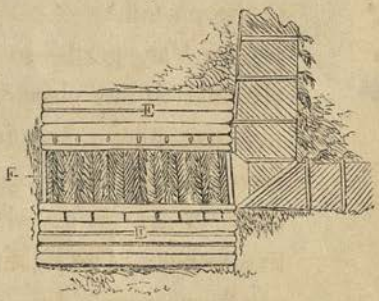


FIG. 2.

THE VARG-GÅRD.

[*To face page* 490, VOL. I.

as possible, and only in cases of the greatest necessity should any of the wood be cut down. The more dense it is near to the outside of the fence the better. Stones, stubs, fallen timber and the like, are to be carefully cleared away from the inner side of the fence, but outwardly, on the contrary, they may without detriment be left even immediately alongside of the fence.

The latter, which in principle is the same as the Gärdesgård, described in note, page 465, is constructed of very stout materials. There ought to be a space of about thirty inches between the several pair of Störar; and the Gärdsel, instead of being laid as usual at an angle of a few degrees, should rise much more vertically, as in that case it is more difficult for the beast to obtain a firm footing and climb over the fence. Supports *b*, Fig. 2, are needful to retain the fence in its proper inclination. They ought to be placed perpendicularly, so as not to assist the imprisoned animal when making its spring; but if trees be growing immediately contiguous to the outside of the fence, fastenings c, Fig. 2, connecting the two (provided they be but little perceptible) may be used in lieu of, or to assist, the supports. The height of the fence and its inclination inwards, are two important matters to be attended to, and should be regulated according to the locality. When following an Ås, or eminence, that is on the inner side precipitous, it need not be more than three and a half to four and a half feet, but on a level not less than eight feet. Its height depends, in short, on the nature of the ground. A certain inclination has this good effect, that the fence is not required to be so elevated, a point which a good eye ought to see and regulate.

The Gärdsel must be packed closely together, so that no aperture be left that may give encouragement to the beast, when impounded, to work or gnaw himself out; and to prevent his burrowing beneath the fence, the stems of small pines or other trees are laid longitudinally on both sides of it, and kept in their place by means of pegs. To the upper edge of the inner side of the fence a row of long poles is fastened lengthwise with withes, and on these again Granris, D D, Figs. 3 and 4, with the points broken and turned inwards, which form, as it were, a chevaux-de-frise; and as wild beasts are accustomed every day to meet with, and leap over, somewhat similar fences in the forest, they excite no apprehension.

When the fence is ready, and to ascertain that it is sufficiently high and has the requisite inclination, one may imprison a pretty large and active dog within the enclosure; and if he cannot find his way out, other animals will not succeed better.

The pit-fall, *a*, Figs. 1, 3 and 4, is excavated on rising ground, that water may not lodge within it, and at the spot where the fences form an angle. It should be nine feet square, and ten in depth, and its sides lined or built up with logs of five to six inches in thickness, placed vertically in like manner with pits in ordinary use for wolves or foxes.

Both sides of the mouth of the pit-fall, E E, Fig. 5, are securely covered over with boards, so that only a space of about thirty inches, F, remains open. To hide this aperture, the thick ends of Gran-ris are fastened to the outer parts of E E, the points of which meeting in the middle, completely conceal it from view.

Over the aperture F again, is a Trumma, or covered

way, G, Fig. 4, which is of boards and about three feet in height by two and a half in breadth. This is absolutely needful, for if the pit-fall was open at the sides or above, the wolf would either leap clean over it, or to the right or left, and thus effect his escape. The Trumma has also the good effect of preventing the snow from accumulating on the Gran-ris so as to depress them.

When now the wolf is imprisoned in the Varg-gård, and endeavours to escape through the Trumma, the Gran-ris gives way under his weight; but as soon as he is engulphed, it rises again like a spring, and the aperture is as imperceptible as before. If, therefore, other beasts be within the enclosure, and attempt to escape the same way, they do not perceive the danger until too late to avoid it. But if, instead of Gran-ris, the aperture was as usual to be covered with straw, which would naturally give way altogether on pressure from above, it would never happen that more than one beast would attempt to escape by that outlet.

The gate by which carrion is introduced into the Varg-gård ought to be situated in a dense brake, or otherwise concealed with Gran-ris, &c.

The carcases of horses are usually exposed as lure, one of which should be deposited outside of the Varg-gård, in the early part of the autumn. Denuded bones of animals are also to be scattered here and there in the vicinity. Crows, ravens, &c. should never be in any way disturbed. The introduction of living animals within the enclosure, has a very beneficial effect; as, for example, to allow hogs, sheep, pigs, &c., to wander about it, for the trail and the scent left by them encourage wild beasts to approach boldly. Goats, as being less affected by cold, and by

their rank odour and bleating best serve to attract the wolves. In some thicket, screened from view, pens, so to say, are formed by means of long and pointed stakes, and so strongly put together that wild beasts cannot rend them asunder. During the day-time the goats are allowed to be together, but at night each is confined by himself to induce them to bleat to one another.

The darker the fence from age the better the Varg-gård succeeds, and if only kept in repair and that the Gran-ris, forming the chevaux-de-frise be renewed annually, it will last for many years. Should one not have leisure in the summer time to attend to it properly, it is better at that season to leave the gate at all times open.

Wolves and other noxious animals are also frequently destroyed at the Luder-plats itself, by means of Gillrade Gevär, or fire-arms, set in the manner of spring guns. Even before the invention of gunpowder, people adopted a somewhat similar mode, which they expressively called *Sjelf-skjut*, or self-shot. For they were accustomed so to place bent bows, that on the beast touching a certain string, the arrow was released and pierced him to the heart.

But the more common plan of killing wolves when congregated at the Luder-plats, is by a species of *Jagt*, or hunting, which the Swedes call *Skytte för glugg*—that is, shooting from a small aperture in the side walls of a cow-house or other out-building, or it may be from a hut erected for the special purpose, near to which the Luder—consisting generally of a dead horse—is placed. But this method can only be adopted in the winter time, say from November, when the snow first falls, to about the end of March.

"The Glugg," so we are told, "ought to be somewhat

more capacious within than without; and either kept closed by a small glazed window, so contrived as to open inwards at pleasure, or partially closed with a wisp of straw. But in the latter case, ample room must be left, as well for the sportsman to see what is going on outside, as to admit the gun, when the time has arrived for using it. If possible, the Glugg should face the south; the east and west may answer, but the north will never do; for to say nothing of being exposed to the coldest wind, one has little benefit from the moonlight.

"The Luder should be deposited about fifteen paces from the Glugg, and in such manner, that either the head or the hind-quarters of the animal face the aperture; for though opinions vary as to which end should be foremost, all agree in this, that it will not answer to place the carcase cross-wise, for in that case the expected visitor would find shelter behind it.

"When the wolf or fox come to the Luder, and commence eating, then is the time to fire. But in bringing the gun to the shoulder, care must be taken that the muzzle does not protrude much beyond the Glugg, or otherwise he may take alarm, and move off. One should first take aim along the line of the snow, and then raise the gun until the beast obscures the *Korn*, or "sight," when the trigger should be pulled. But the sportsman must be careful not to fire too high, as from the usual loftiness of the Glugg, and the short range, he is apt to do. The gun—that it may be the more readily handled—should be shorter than usual; and it should also be of pretty large calibre. To avoid the danger of setting fire to

the building, all cobwebs, &c., should be carefully swept away; and one should load with wadding of such a nature as not to be easily ignited. If the beast fall to the shot, he ought not to be approached incautiously. When only wounded, he must be immediately sought after with a lanthorn. But if not found in the vicinity, it is most advisable to desist from the search until the coming daylight renders it practicable to track and follow him to a distance.

"To watch at the Glugg, two men are required, so that they may sleep by turns. They should always be accompanied to the ambush by a third, who ought to remain with them for a while, because the fox's cunning is such that, otherwise, he may suspect a trap, and keep his distance. From dark, when all is still, to about eleven o'clock, the fox usually makes his appearance. But if not during that time he will not probably show himself before three in the morning, or between that hour and when people are up and moving; but after all, the time of his coming is rather uncertain. It is known, however, that the farther the season be advanced, the later he appears, and that he never shows himself at midnight.

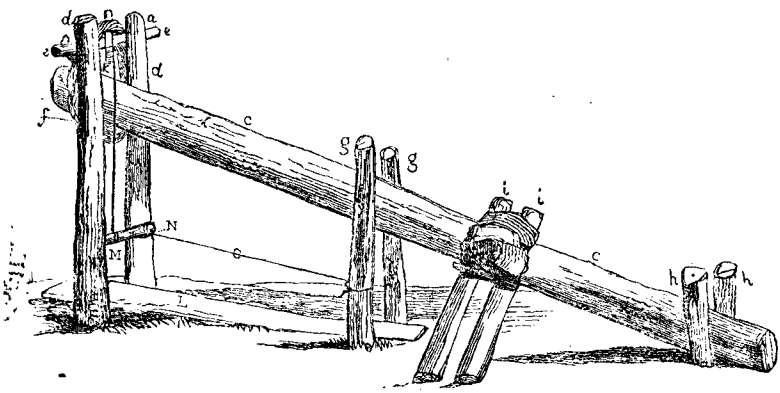
It should be observed that shooting thus "för glugg" is seldom attended with much success during *bar-vintrar*—that is, winters when there is little or no snow on the ground; also, that as wild beasts seldom visit the carrion at the new moon, it should not be laid out until the first quarter, when the nights are light, and when of course it is best to shoot. It is worthy of remark, that although the wolf seeks the Luder-plats only during very

hard weather, the fox, on the contrary, visits it in preference when the snow is but moderately deep and the temperature not particularly severe.

Many wolves are captured in Scandinavia in the common steel trap. As regards the midland and southern provinces of Sweden, this is chiefly the case in those set for foxes; for owing to the more wandering life led by the wolf than by the fox, his duller organs of smell, and consequent less capability of winding the bait from a distance, together with it being probable that his instinct leads him in quest of larger game than the fox is satisfied with, it would be but a poor speculation to lay out traps expressly for the wolf—the rather because so many other and more advantageous modes can be had recourse to for his destruction.

However, in the more northern districts of the peninsula, especially in Lapland, where the wolf follows the herds of reindeer in their wide wanderings from forest to fjäll, and from fjäll to forest, this mode of capture is much resorted to, and, as it is said, with very considerable success. But the trap is not baited, being merely concealed beneath the snow in such paths as the beast is likely to traverse. It is fastened by a chain to a block of wood some six feet in length, and of considerable thickness. This precaution is adopted in order that in the event of bad weather, the trap itself, as well as the prisoner—if one happens to be made—should not be altogether buried in the snow and lost. It is only brought into use in the winter time, after the snow has fallen. It is placed in preference in tracks made by the herds of tame reindeer; for these *Lapp-vägar*, as they are called, are always frequented by

several kinds of wild beasts. "First in order after the herd," M. von Wright informs us, "comes the daring wolf, who now and then picks up a fawn, or even an old deer, that straggles from the herd. Then the voracious glutton; and after him the fox, who, by his cunning, manages to share in the plunder that his worthy predecessors have seized by force. Lastly, comes the Arctic fox, with the hopes of picking up some of the crumbs that may have fallen from his masters' table. Several traps are usually set on the same pathway, at a distance of one to two miles apart, in order that though the wolf may avoid the one toil he may fall into some of the rest."



THE BRANDAR.

Another very common method of capturing the wolf, is by means of the *Brandar*, or *Stock-fällor*—literally falling-beam—which is placed across a forest-path, known to be

frequented by that animal. But this kind of trap is not now so generally adopted as a hundred years ago, when it was very common.

The above drawing represents the Brandar, when gill-rade. *d d*, *g g*, and *h h*, are three pair of stout upright posts; L, a stock lying lengthwise on the ground, between *d d* and *g g*, but which, by the aid of moss and mould cast up on either side, is completely concealed from view. C C is a heavy log—the drop, in short. I I are blocks of wood or stones laid on C C, to increase its weight; *e e* a stick, resting crosswise on pins, in the upper part of the posts *d d*; *f*, a hank formed of spruce-pine or juniper boughs, in which the drop C rests; K, a small wooden pin, inserted in the upper part of the hank *f*, and resting against the stick *e e*; M, a pin inserted at about a foot from the ground, in one of the posts *d*, its outer end resting in a notch N in the inner side of the opposite post *d*; O is a brass wire, previously *glödgad*—that is, exposed to the flames, as well to discolour it, as to render it more ductile—one end of which is fastened to the pin M, near to the notch N, and the other to one of the posts *g*; a second wire, attached to the lower end of the small pin K, is securely fixed to the middle of the pin M.

When, therefore, the wolf breasts the wire O—and no beast of any size can pass under the drop C without so doing—the pin M is pulled out of the notch N; as a consequence, the pin K is released, and turning upwards, liberates the hank *f* and the weighted drop-log, which descends instantaneously, and crushes the animal.

With this, as with several other similar devices for the

destruction of wild beasts, it is always desirable to run a Släp, consisting of a roasted cat, or some such savoury morsel, about the surrounding country, and thence to the immediate vicinity of the trap, thereby to draw the wolves towards the spot.

Wolves are also frequently captured by means of the *Varg-krok*, or wolf-hook, gillrad in a similar manner to that for the fox, of which mention is made in the chapter treating of that animal. At times, also, as regards Lapland at least, the wolf is taken by means of snares, of which more hereafter.

Though many and various be the devices adopted in Scandinavia for the destruction of the wolf and other noxious animals, none exceed in ingenuity the employment of *Knall-silfver*, or fulminating-powder. This deadly preparation, after being duly protected from injury, is carefully introduced into the leg or thigh bone of a fresh-killed calf or sheep, from which the marrow has been first extracted. Afterwards the bone is placed in a part of the forest where the wolf is known to haunt, and when the beast begins to gnaw it, an instant explosion takes place, and his head, as a consequence, is blown to atoms!

More wolves, however, are probably destroyed by poison than by any other means. Arsenic is that in most general use; but from its causing almost immediate sickness, and from wolves and foxes being often able to throw it up again, many give the preference to nux-vomica—called in Sweden *Räf-kaka*, or fox-cake—which is without smell, and does not provoke vomiting; it has the disadvantage of a bitter taste, however, which doubtless prevents many animals from par-

taking of it. And poison would seem to be administered in powerful doses, for one often hears of wolves being found dead either on the very spot, or immediately near to it, where it was swallowed.

M. ——, when speaking of the properties of the several poisons, says: "One winter I opened the breast of a sparrow, and introduced one-eighth of an ounce of white arsenic (arsenious acid) into the crop, after which the aperture was drawn together, and the bird laid out to be frozen. The following night it was devoured by a fox; and on pursuing his track the next day, it was found he had not gone more than two hundred paces from the spot where he had eaten it before he began to retch. He seemed to have suffered greatly; for he had sometimes lain down and vomited, and at others crawled on a few paces. At length the sickness had ceased, and so far as I was able to follow the track, his steps seemed to become steadier and steadier. Some nights subsequently I laid out another small bird similarly prepared, though with a very much stronger dose—say three-eighths of an ounce of the same description of arsenic, which was likewise eaten up, and, as I believe, by the very same fox. This time he had been seized with immediate and severe vomiting, and also with violent evacuations; for the feet and other remains of a hare which he had a little before devoured, had passed his stomach undigested, and were now found to be altogether powdered with arsenic. I conceived, in consequence, that *Michel** had made his last meal; but, to my great astonishment, he had neither lain down so often, nor retched so long

* The nickname of the fox, as Nalle for the bear.

as the first time, before he again recovered; so that all attempts at pursuit were useless. Once more I tried a similar experiment on a fox with a considerable portion of pure arsenic acid, evaporated to dryness, and afterwards pulverized, which is a much stronger poison than arsenious acid, and which, moreover, can easily be dissolved in fluids; but even this time, and after well clearing out his stomach, Michel went his way.

"The horse, or other animal, whose carcase is to be poisoned," M. —— farther tells us, "is killed in such wise that the blood is not lost. With the exception of a strip of the breadth of one's hand, running the whole length of the back, the skin is then taken off; and after deep incisions have been made everywhere in the flesh with a knife, the poison is well rubbed into the whole body as well inwardly as outwardly. This matter accomplished, the skin is once more drawn to its place and sewn together. The carcase is then laid for several days together in some warm place—such as a dunghill, where it is covered with straw—in order that the poison may be thoroughly disseminated throughout the entire body and entrails. When it has been thus duly prepared, it is exposed in a spot known to be haunted by wolves: in preference, on an eminence, free from boulders, trees, bushes, &c., as such may excite suspicion on the part of wild beasts. Gloves should be worn whilst handling the carcase, and these, as well as the sledge on which it is conveyed—in short, everything with which it comes in contact — must be sprinkled with the urine of horses or cattle, mixed with the *Saft*, or juice from fresh horse-dung. Fresh horse-dung must also be strewed, as well at the

bottom of the sledge, as on the spot where the carcase is deposited. When all is in order, the entrails, &c., of animals that have not been poisoned, are strewed around. No one afterwards must go within one hundred paces of the Luder-plats in common shoes, unless wrapped round with pieces of old and clean linen, containing a portion of fresh horse-dung; but he must either ride or use Skidor; and one must be specially careful not to spit, or commit other uncleanness near to the spot. A Släp, consisting of any kind of rotten flesh, or what is better, the hind-quarters of a recently-skinned female wolf, should be trailed after a sledge everywhere in the neighbourhood."

In many districts certain individuals on receiving a trifling remuneration, which is levied as a tax on the inhabitants, take upon themselves the office of poisoning the wolves and other wild beasts, and for this purpose cause the carcases of animals, prepared somewhat as described, to be laid out every here and there in the forest. Such was the case at Sollebrunn, situated, as said, some twenty miles to the south of Ronnum. One winter, when passing through that village, I remember seeing two wolves which had just been picked up dead near to the Luder-plats, and were then lying before the house of the post-master, who was at that time the public exterminator.

Fortunately, poison is seldom exposed excepting in the winter time; but in the districts where it is resorted to, English sportsmen will do well to bear in mind that dogs at all seasons of the year run some risk. For, though only bleached bones may remain at the Luder-plats, or in the vicinity—wolves and other animals often drawing them a

considerable distance—the venom sometimes remains embedded in them for a long while afterwards.

We read, for instance, that: "At the hamlet of Tälle and parish of Hardemo, in the province of Örebro, a carcase had been so strongly impregnated with poison, that the wild beasts shunned it altogether. In the spring it was buried, but some bones belonging to it having been overlooked, were cast upon the roof of a neighbouring house, where they remained exposed to the rays of the sun the whole of the summer. The following winter there was a great fall of snow, and a drift of such height was formed near to the side of the building, that a hungry fox arriving there one cold night, easily mounted on the roof, and digging up the bones, commenced gnawing them; but the poison affected him so powerfully, that the following morning he was found lying dead on the spot where he had been eating. From the appearance of the snow, it did not seem as if he had rolled about or suffered in any manner; but, on the contrary, he still retained the half-eaten bones between his fore paws."

Independently of the innumerable devices of man to cause his destruction, the wolf is sometimes his own executioner.

"Two years ago," says Lieutenant C. G. Jack, "a wolf in the parish of Western Fernebo made captive of himself in a very singular manner. He was found hanging between the stems of two fir-trees growing out of one and the same root, but which, separating at some feet from the ground, formed a Klyka, or fork. The probability is, that whilst pursuing a cat, a martin, or a squirrel that had taken refuge

in the tree, he had, in his efforts to catch his prey, made a great leap, and in his fall got thus fixed. A spruce pine of nearly six inches in diameter, growing close at hand, was nearly bitten through by the beast whilst thus imprisoned. The people in the village stated they had heard for some considerable time a sort of plaintive howling in the forest, but no one would take the trouble to ascertain the cause, which was not found out until some time afterwards, when the herd-boy accidentally discovered the carcase suspended in the manner described."

APPENDIX.

APPENDIX.

As it may interest the Faculty, I here subjoin some remarks on the Cholera, with which I have been favoured by a highly talented medical friend of mine, who had ample opportunities of studying the malady in all its phases, as well in Stockholm, as Gothenburg :—

"In most cases the attacks were preceded by premonitory symptoms. The more usual were a sense of fulness in the epigastric region, and a slight diarrhœa.

"The disease itself was generally ushered in by copious rice water-like alvine dejections, sometimes accompanied by vomiting; pain at the pit of the stomach which eventually became excruciating, and constant thirst succeeded, with an intense desire for cold drinks; after a short time, cramps in the extremities supervened, which were very painful and of long duration.

"After two or three, or at most six hours of diarrhœa and cramps, the symptoms of collapse commenced. The skin became cold to the touch, and of a bluish tint; the features contracted; the eyes deeply sunk, and bloodshot; the tongue, then generally of a bright red colour, felt cold,

as did the breath at a more advanced stage of the disease; the pulse was quick, and when the collapse was fairly set in, hardly perceptible; the patients were quite sensible; and during the cessation of the cramps, generally calm. The greatest number of deaths took place in this stage.

"In those cases in which dissolution did not ensue during collapse, the patients either recovered by a remission of the symptoms, or a subsequent stage manifested itself, marked by great febrile reaction, severe headaches, delirium, dryness of the tongue, and pain at the pit of the stomach, which proved fatal in many instances.

"The morbid appearances after death, were: congestion of the blood-vessels in the brain, the sinuses being in all cases literally gorged with blood in a fluid state; in many instances exudation of limpid serum into the arachnoid membrane, and between that and the *pia mater;* the lungs, particularly at the back, congested; the heart flaccid; fluid blood in the right cavities, the left empty; the stomach and intestines pale, containing fluid resembling the alvine excretions. In all cases the gall-bladder was distended almost to bursting with concentrated bile. No bile observed in the duodenum. The bladder contained scarcely any fluid. The secretion of urine seemed to be suppressed in almost all patients.

"Those that came under medical treatment at an early stage, with diarrhœa, and other premonitory symptoms, were, with few exceptions, cured. The remedies consisted of an emetic; if the tongue was foul, a dose of castor-oil was given, and afterwards rhubarb, with some bitter or aromatic infusion, and small doses of laudanum. The diet was reduced to farinaceous food.

"The principal methods of treatment, after the disease was fully established, were: bleedings, emetics, Stevens's saline mixture, camphor — this last was at one time in great request — calomel one grain every five minutes, cold affusions, frictions with spirits of camphor, and insertion between feather beds to provoke perspiration. Although these were the *means* in most frequent use, I am pretty sure there were few preparations in the pharmacopœia which were left untried.

"When the reaction after collapse had set in, with fever, headache, and delirium, it was treated by general or local abstraction of blood, gentle laxatives, calomel, and opium, and general antiphlogistic regimen.

"During convalescence, tonics and bitter infusions were given.

"But after all, as regards treatment, my opinion is, that we know just as little now as we did before the disease broke out. The fact is, that in the beginning nothing succeeded, and at last everything answered well. It is my belief that during the first fourteen days after the appearance of the cholera in any place, two out of three cases were fatal; whilst at an after-period the recoveries were infinitely more numerous in proportion. The only remedy that seemed to have a marked influence on the disease was bleeding; although, when collapse was fairly established, from the blood having assumed a tar-like consistency, it was of less efficacy.

"Owing to the want of authentic reports from different parts of the country, it is impossible to state with accuracy the number of cases, and the proportion of deaths. In some reports it is quite evident that all cases — even those which

only showed premonitory symptoms—have been included. In others, those alone have been noted in which the cholera itself was fully developed. This is the only way to explain the discrepancies. For example, from one town it is reported that out of one thousand two hundred cases, only one hundred and ninety had terminated fatally; from the navy yard at Gothenburg, on the contrary, out of one hundred and seven cases sent to the hospital, sixty-three died. And the results were similar in the establishment superintended by me in Stockholm, where out of two hundred patients ninety-nine were lost."

END OF VOL. I.

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